Kaiser-Hill

ROCKY FLATS
Environmental Restoration Program

PROJECT MANAGEMENT PLAN

August 1, 2000

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Rocky Flats Environmental Technology Site
Closure Project

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Approved:

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date

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Appendices

1. MANAGEMENT APPROACH

The new contract between the Department of Energy (DOE) and Kaiser-Hill (K-H) incentivizes K-H to complete the Rocky Flats Closure Project (RFCP) in the most cost-effective manner possible with ***significant*** penalties for unsatisfactory safety, environmental, safeguards and security, and cost variance (CV)/schedule variance (SV) performance. While SV is evaluated, the contract places a greater value in delivering the project for lower cost than completing the project earlier. Under the new contract, the transaction level with DOE is greatly reduced because K-H is responsible for virtually all differing site conditions. DOE is only responsible for government-furnished items and services as specified in Section C, Statement of Work (SOW), Technical Exhibit A. To successfully complete the scope of work, K-H must conduct all work safely and cost-effectively through the Integrated Safety Management (ISM) process.

The ISM process is used by Kaiser-Hill as the framework for the planning and execution of the RFCP. At a macroscopic level, the five principle elements of ISM have been applied to develop the overall closure strategy and the 2006 Closure Project Baseline. For example, instead of considering hazards and controls for protection of workers in the traditional sense, "hazards" are also the risks and uncertainties in the baseline, and the controls are project management systems and controls designed to mitigate those risks.

In addition to the use of ISM as an over-arching planning and managing strategy, ISM is used as the primary tool for assuring safe accomplishment of work at the floor. All work conducted at the Site is performed in accordance with the Integrated Work Control Program (IWCP). The IWCP is the floor level planning and execution tool used at Rocky Flats. The ISM process has been fully integrated into the IWCP process. The IWCP has been tailored over the past two years to incorporate planning for environmental stewardship, safeguards and security, and quality assurance.

Consistent with the new contract, by broadening these principles to cover work planning at the Site level, safety and stewardship issues become the central linkage for execution of the entire project, and are embodied in all work activities. This Project Management Plan (PMP) continues this philosophy. The plan is organized around each of the five ISM elements:

- Section 2—Project Scope
- Section 3—Identification of Project Risks
- Section 4—Controls
- Section 5—Work Activities
- Section 6—Feedback

Section 7 includes a list of references. Appendices are included to provide detailed information about the project.

2. PROJECT SCOPE

The RFCP organization under the new contract is shown in Figure 1.

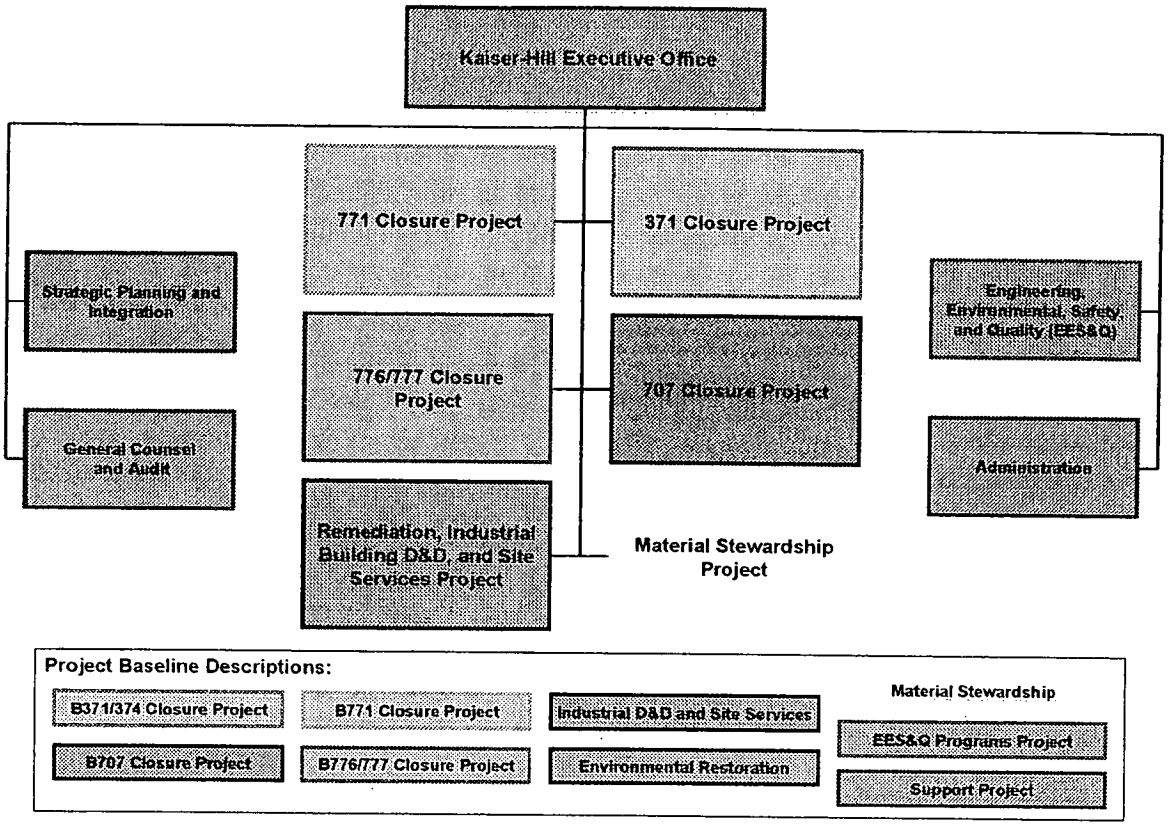


Figure 1: 2006 Closure Projects

The SOW tables from the contract are included as Appendix A. The tables have been modified to also identify the lead and supporting projects for each scope item.

2.1 Scope

This PMP addresses the Environmental Restoration (ER) Program at the Rocky Flats Environment Technology Site (RFETS) as part of the Remediation, Industrial D&D and Site Services (RISS) project. The overall scope includes environmental restoration including any remaining characterization. The ER cost account structure that supports the SOW is:

G ER Project
GAA Project Management
GAB Buffer Zone Closure
GAC Industrial Area Closure

2.1.1 ER Program

The scope of this program is as follows:

- Complete characterization
- Develop and recommend remediation alternatives
- Prepare decision documents
- Design and implement approved remedial actions
- Provide appropriate records to the Administrative Record

This program is divided into two zones: Buffer Zone (BZ) and Industrial Area (IA). The complete list of release sites, with the current status and assumed remedial actions, is included in the ER Action Tracking List (ERATL) provided in Appendix H. Several Corrective Action Decision/Record of Decision (CAD/ROD) documents are pending based on the Rocky Flats Cleanup Agreement (RFCA) outline. However, discussions have been initiated and are being pursued with the regulatory agencies to consolidate the CAD/ROD documents into a single CAD/ROD for the site.

The ER scope for closure of the RFETS includes characterization and remediation of all remaining Individual Hazardous Substance Sites (IHSSs), UBCs and Potential Areas of Concern (PACs) where required and according to RFCA, and documentation of no further action (NFA) decisions where remediation is not required. The decisions will be documented in the following:

- IA SAP
- IA RSOP which will describe the remaining remedial actions in the IA.

- Additional sampling plans and Proposed Action Memorandum as required for IHSSs, UBCs and/or PACs that are not covered by the RSOP.
- Closeout Reports for the appropriate remedial actions.
- Interim Proposed Plan and CAD/ROD that will define land use and cleanup levels.
- Administrative Record for the appropriate areas and actions.

Following is the list of actions required for closure by cost account and by IHSS group. ERATL contains the listing of IHSS groups with the associated UBCs, PACs, IHSSs, and plumes required for closure.

2.1.2 GAA – Project Management

This cost account includes the scope for ER programmatic support including, cost and schedule reporting and controls, coordination with Closure Projects planning, coordination with other Site organizations and with regulators and citizen groups. Routine administrative support, supplies and training are also included in this cost account.

2.1.3 GAB - Buffer Zone Closure

Installation of three reactive barrier systems as remedial actions for the Mound Plume, Solar Ponds Plume and the East Trenches Plume have been completed. In addition, monitoring wells have been installed for monitored natural attenuation as required for the 903 Pad/Ryan's Pit Plume, the PU&D Yard Plume, and the Present Landfill Plume. Monitoring and maintenance of the barrier systems and monitoring wells will continue. Primary remedial actions remaining include the 903 Pad, Present Landfill, Trench 7, the Ash Pits, the B-series pond sediments, and final configuration of ponds and drainages at Site Closure. All other remedial actions for known release sites requiring remedial actions in the BZ have been completed. The detailed scope in this cost account follows.

2.1.3.1 GAB2 NE Area Closure Projects

Group NE-1 Pond Sediment Removal Project

Sediment characterization data indicate that Ponds A-1 and A-2 will not require sediment removal. This activity is currently scoped for removal of 10 percent of the sediments in Ponds B-1, B-2 and B-3, which is assumed to be the amount above RFCA Tier 2 Soil Action Levels. Additional characterization will be required to determine the extent of contaminated soils and the potential future impact to surface water quality. B-3 is assumed to be contaminated above Tier 2 action levels. The remaining A-, B- and C-series ponds are assumed to require no additional action.

Group NE-2 IHSS 111.4 Trench 7 Remediation

Trench 7 was used to dispose of sanitary wastewater treatment plant sludge. Investigation data indicate the presence of radiological and volatile organic compound contamination above RFCA Tier 1 subsurface soil action levels. The extent of radiological contamination appears to be limited to the trench to a depth of 5 to 8 feet. Trench dimensions are 115 feet long, 15-feet wide, and 10-feet deep. Trench 7 does not impact groundwater but will require a remedial action.

Group NE/NW NE-1407 OU 2 Treatment Facility, NE-1408 OU 2 Test Well, NE-1409 Modular Tanks and 910 Spill, NE-1412 Trench T-12 East Trenches, NE-1413 Trench T-13 East Trenches, NW-1501 Asbestos Release at PU&D Yard & IHSS 174a.

With the exception of IHSS 174a, this group is expected to be designated NFA. In 1993, the OU 2 surface water treatment facility leaked approximately 50 gallons of water from a secondary containment line, but the water was collected. Potential contaminants of concern were low levels of VOCs and chromium. The OU 2 Test Well, Modular Tanks and 910 Treatment System Spill, and Asbestos Release at PU&D Yard were characterized and closed as NFA sites in 1999. Two of the East Trenches now lie beneath the East Access Road. During road construction in 1968, an unknown amount of trench material was removed, and T-12 (NE-1412) and T-13 (NE-1413) were covered by asphalt. These trenches were originally 10 feet deep with several feet of soil cover and were used for disposal of sanitary wastewater treatment sludge that may have been contaminated with low-levels of uranium and plutonium. Characterization data from these trenches are below action levels. IHSS 174a was characterized in 1997 and one sample was above action levels. This area will require an action.

Group 900-2, IHSS 153 Oil Burn Pit No. 2 and IHSS 154 Pallet Burn Site

These areas are located north of Central Avenue under the southern protected area fence. Drums containing oil contaminated with uranium were burned in two parallel trenches prior to 1965. Material in the drums included coolants, still bottoms, and waste oils from Buildings 444 and 881. Wooden pallets were reported to have been burned at IHSS 154 although no documentation can be found that confirms this. No documentation exists that details the fate of the constituents released to the environment. This area will be characterized after the Protected Area fence is removed. Remediation of this site will depend on the characterization results. However, much of the soils in the area were removed during construction of the Protected Area fence and it is assumed that these sites will be NFA.

Group 900-12 East Trenches Regrading

This group contains the East Disposal Trenches T5 though T-11, excluding Trench T-7 (IHSS 111.4). These trenches contain primarily sewage sludge, and were previously characterized during the OU 2 RCRA Facility Investigation/Remedial Investigations (RFI/RI) investigation and subsequent investigations. These trenches do not require

additional characterization or remediation. However, these trenches require regrading and revegetation.

2.1.3.2 GAB3 SW Area Closure Projects

Group SW-1 Ash Pits- IHSSs 133.1, 133.2, 133.3, 133.4; PAC SW-1702

There are six Ash Pits located in the southwest Buffer Zone that were used to dispose of ash from the incinerator that operated from 1952 to 1968. The incinerator was used to burn general site wastes and small quantities of depleted uranium. The Ash Pits are approximately 150 to 200 feet in length, 12 feet wide, 10 feet deep and covered with 3 feet of earth. A sampling program documented approximately 1 to 8 kilograms of depleted uranium per ton of ash. Contamination included uranium 233, 234, 235, and 238 isotopes, and low-levels of antimony, beryllium, cadmium, copper, molybdenum, mercury, nickel, and silver. Due to the limited mobility of metals and radionuclides in the underlying claystone and siltstone, contamination is assumed to be limited to the waste fill. The scope of this action is to remove the contents of the Ash Pits, but not to remove any underlying soils.

2.1.3.3 GAB4 SE Area Closure Projects

Group 900-11 IHSSs 112 and 155 - 903 Pad and Lip Area, PAC SE-1602, East Firing Range, IHSS 140 Hazardous Disposal Site, IHSS 183 Gas Detox area.

Releases at the 903 Pad and Lip Area are the primary cause of radiological contamination in the soil at RFETS. Drums containing radiologically contaminated oils and VOCs were stored at this location from 1958 to 1967. An estimated 5,000 gallons of contaminated liquid containing approximately 86 grams of plutonium leaked at this location. Some of the radiologically contaminated material was removed, the surrounding area was graded, and an asphalt cap was installed. Contamination also occurs east of the 903 Lip Area in an area known as the Americium Zone. Sampling and analysis results confirm that radiologically contaminated soils remain above RFCA Tier 1 action levels and remedial actions are required in these areas. The remaining scope for this task is to define the extent of contamination associated with the firing range, and identify and perform a remedial action for the contaminated soils. IHSSs 140 and 183 are within IHSS 155 and are expected to require no additional action.

2.1.3.4 GABA Buffer Zone Caps

Group 000-5 Present Landfill

The Present Landfill consists of approximately thirty acres and contains six additional IHSSs and PACs within its boundary, IHSS 114 – Present Landfill, IHSS 203 – Inactive Hazardous Waste Storage Area, IHSS 167.2 and 167.3 Spray Evaporation Areas, PACs

NW 1502, 1503, and 1504. The six additional IHSSs and PACs have been proposed as NFA. The Present Landfill was operated as a municipal landfill from 1968 through 1998, is identified as an interim status unit under RCRA and is required to be closed under the provisions of RFCA Attachment 10 because it received hazardous waste. The remedial action for the Present Landfill is to close it by means of an engineered evapotranspiration earthen cap. As required by RCRA, post-closure monitoring and cap maintenance are required.

2.1.3.5 GABB Buffer Zone Miscellaneous Projects

Buffer Zone Groundwater Projects: IA Plume-Industrial Area Groundwater Plume Treatment System Installation

The IA groundwater plume is poorly defined. A remedial action may be required for this plume to meet RFCA surface water standards after Site closure. Data evaluation will be performed to determine the extent and behavior of the plume. If a treatment system is required, it is expected to be a passive or low maintenance collection and treatment system that will provide long-term protection of surface water. While an evaluation of the characterization data, passive/low maintenance treatment technologies will be completed prior to a remedial action, the current assumption is that the system will be similar to the passive collection system with reactive barrier technology installed for the East Trenches Plume. This scope includes evaluation, initial installation, and startup of the system. Long term monitoring, operation, and maintenance of the systems will be required, but is not included in this scope or estimate.

Landfill Caps Monitoring and Maintenance

Three caps are projected to be constructed: at the Solar Evaporation Ponds, at the Original Landfill and at the Present Landfill. All will require monitoring and maintenance to ensure that they are maintained in a stable condition and are remaining effective. Piezometers will be installed during construction to monitor water levels. This scope is to monitor the water levels in the cap areas and cap effectiveness until Site Closure.

Groundwater Plume Collection and Treatment Systems O&M

There are three groundwater collection and treatment systems currently in operation and one more is planned in the future. While these systems are passive and, therefore, low maintenance, there is an ongoing requirement to monitor system performance, perform preventive maintenance, and replace the treatment media every 5 to 10 years, based on the performance monitoring data.

OU 1 CAD/ROD Amendment/French Drain Removal

The 881 Hillside Area is comprised of ten IHSSs. All IHSSs except IHSS 119.1 were accepted as NFAs. A CAD/ROD for source removal at IHSS 119.1 was approved in 1997. Based on additional data, a source removal was not required. The CAD/ROD will

be revised to reflect a remedial action of monitoring the existing collection system along with removal of the OU 1 French Drain.

Pond A-5 Indiana Street Dam/Walnut Creek Source Mitigation Measure

At closure, water leaving the Site must consistently meet the thirty-day moving average standard of 0.15 picoCuries per liter (pCi/L) for plutonium and americium. Construction of a new reservoir within the Walnut Creek drainage may be required to ensure that RFETS surface water meets state and federal water-quality requirements. The contaminant source in the Walnut Creek drainage basin is diffuse and a by-product of activities occurring throughout the history of the Site. If required, the new reservoir will also serve as a detention pond to collect any legacy contaminants migrating through the drainage basin via surface water. As part of this activity, data will be evaluated to determine if a dam is required. If required, a compacted earth dam will be constructed located on Walnut Creek at Indiana Street.

2.1.3.6 GABC Buffer Zone Closure Documents

Interim CAD/ROD

This document will describe soil action levels and the future land use for the Rocky Flats Site. The document will serve as the required 5-year review for existing CAD/RODs, and will also serve to close out the following open OUs:

- OU-5 – Woman Creek Priority Drainage which consists of the Former Incinerator Area, Concrete Wash Pad, Detention Ponds C-1 and C-2, and Surface Disturbance. A Phase I RFI/RI for this OU was conducted in 1995. The Ash Pits are scheduled for an accelerated remedial action, and the other areas have been proposed for NFA.
- OU 6 – Walnut Creek Priority Drainage is comprised of 19 IHSSs along or within the North and South Walnut Creek drainages. A Final Phase I RFI/RI was completed for this OU in 1996 that concluded that OU-6 did not pose a risk and recommended no remedial action be taken. The RFI/RI was never approved by EPA or CDPHE.
- OU-7 – Present Landfill and six associated IHSSs and PACs. The six IHSSs are within the boundary of the landfill and are proposed no further action. The remedial strategy for the Landfill calls for capping as a presumptive remedy and final response.

2.1.4 GAC Industrial Area Closure

Most of the characterization and remediation for release sites in the IA is not completed and will be implemented following development of the IA Strategy. The strategy includes development of a single IA Sampling and Analysis Plan (SAP) and a single IA RFCA Standard Operating Protocol (RSOP). Characterization and remediation will then proceed according to the approved plans, requiring only notification of the regulators with no

additional formal approval process. This will allow the work to proceed, as funding is available and the release sites become accessible. Remediation of under building contamination (UBC) and release sites near buildings and structures will be performed in conjunction and coordination with Decontamination and Decommissioning (D&D) so that remediation occurs immediately following building demolition.

2.1.4.1 GAC0 000 Area Closure Projects

Group 000-2 Old Process Waste Lines IHSSs 121, 123.2, 132, 127, 147.1, and 162, PAC 100-602 and Tanks T-29 and T-31

The scope consists of characterization and remediation of the original process waste lines. (OPWL). The OPWL consists of approximately six miles of older process waste lines. Approximately 50% of the process waste lines and most of the tanks were grouped with associated buildings. D&D will be responsible for the lines and tanks within and immediately under the buildings. All of the lines and tanks under the building slabs are considered part of the UBC and will be remediated with the UBC. This scope includes the main lines not associated with any specific building. Characterization is focused on the soil around the tanks and pipes. The observational approach will be used for additional sampling points as part of the same investigation. Remediation consists of removing leaking lines and the soil associated with those releases. It assumed that for deep contamination where an exposure pathway does not exist, remediation will not be required. Lines not removed during source removal actions will be filled with foam or other appropriate material to prevent the lines from becoming a pathway for contaminant transport.

Group 000-3 Sanitary Sewer and Storm Sewer, PAC 000-500

Group 000-3 consists of the scope to characterize and remediate the sanitary sewer system and the storm drains. Sanitary Sewer lines near or beneath buildings are included in other groupings and only the larger main lines were considered in this estimate. The total length of the sanitary sewer lines requiring investigation and potential remediation is estimated to be 37,000 feet. Of this, it is assumed that only 5% is contaminated. Some structures associated with these systems will need to be removed. Characterization is focused on the soil around the lines. Remediation consists of removing leaking lines and the soil associated with those releases. It is assumed that about 6,155 cubic yards of soil for both systems will have to be excavated and disposed of off-site. It is assumed that thermal desorption will not be required and that any waste will be low-level mixed or low level. It is assumed that the sanitary sewer can be flushed and clean closed by filling the void space with foam. For the Storm Drains it is assumed that both ends of the pipes will be filled with grout to seal off the line.

Group 000-4 New Process Waste Lines PAC 000-504

The new process waste lines (NPWL) group is not an IHSS or a PAC. It overlaps IHSS 121 extensively and is a RCRA Unit. An estimated 6,300 feet of line will require characterization. This does not include lines that overlap with the OPWL. Like the OPWL, characterization is focused on the soil around the tanks and pipes. Remediation consists of removing leaking lines and the soil associated with those releases. It is assumed that 5% of the main lines are associated with contaminated soils. It is assumed that pipelines can be flushed and clean closed by filling the void space with foam.

2.1.4.2 GAC1 100 Area Closure Projects

Group 100-1 UBC-122 and Tank 1

This project includes the UBC for B122, the Medical Facility, and Tank 1 (T1), Underground Stainless Steel Waste Storage Tank. The soil beneath the building is potentially affected by nitrates and trace radionuclides. No characterization has been performed of the soils underlying the building. Tank 1 (T1) is an 800-gallon stainless steel underground tank removed in January 1984 that held waste streams from B122. The scope of this action is to characterize the soils underlying B122 and the associated tank area, compare the characterization data to site action levels, and perform a source removal action if required.

Group 100-2 UBC-125 Remediation

This project includes the characterization and remediation of UBC for B125, the Standards Laboratory. The building footprint is approximately 17,00 square feet. The scope of this action is to characterize the soils underlying B125, compare the characterization data to site action levels and perform a source removal action.

Group 100-3 B111 Transformer PCB Leak

PAC 100-607, B111 Transformer Polychlorinated Biphenyls (PCB) Leak is located in the basement of B111. This transformer held approximately 500 gallons of cooling oil that contained PCBs. Leaks from this transformer have been documented from 1984 through mid-1986. Samples collected in 1984 indicated that PCB levels in the cooling oil were below the Environmental Protection Agency (EPA) regulatory limit of 50 parts per million. Residual stains on the transformer pad were noted in 1987. No documentation that details the fate of the constituents released to the environment exists. PAC 100-607 will be characterized after B111 is removed. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site.

Group 100-4 UBC-123, IHSS 148, PACs 100-603 and 100-611

This project includes the B123 UBC, the Health Physics Laboratories, two PACs, and one IHSS. The building footprint is approximately 18,500 square feet. Decontamination and demolition of Buildings 123, 123S, 113 and 114 was completed in 1998, with the B123 slab and foundation left in place. Areas of the slab that could not be decontaminated to unrestricted release were encapsulated with epoxy paint to fix any removable contamination and covered with steel plate. Preliminary soil characterization of the B123 area was conducted as part of the activities. Final characterization must occur to determine whether a remedial action is required. If required, the source removal action will include field implementation, confirmatory sampling, and preparation of a Closeout Report.

Group 100-5 PAC 100-609 - Security Incinerator

PAC 100-609 - Security Incinerator is located south of B121 and was used for incineration of classified documents. Dates of operation are unknown, but the incinerator was operating in 1980 and was still in existence in 1985. No Carbon Required (NCR) type paper containing PCBs was burned and the ash was disposed of at the Present Landfill. Dioxins and furans could have been generated from incineration of this paper. No documentation was found detailing the release of contaminants to the environment. Characterization will occur to determine whether a source removal action is necessary. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site.

2.1.4.3 GAC3 300 Area Closure Projects

Group 300-1 IHSSs 128, 134 (north), and 171

This project consists of characterization and remediation of three IHSSs: 128-Oil Burn Pit Number 1; 134 (north)-Metal Disposal Site (north), and 171-Fire Department Training Ground. In 1956 at the Oil Burn Pit, an estimated 5 to 10 barrels of depleted uranium contaminated oil were dumped into the south side of a pit located north of B331 and ignited. A direct survey of the soil and oil residues in the pit had alpha readings of up to 750 cpm. The material was left in place and the pit backfilled. Sage Avenue and the Sage Avenue Ditch are now built over the area. IHSS 134 includes two reactive metal disposal sites. At the Metal Disposal Site (north), magnesium, lithium, sodium, and calcium were disposed of by burning in a shallow depression. At the Fire Department Training Ground, diesel fuel mixed with gasoline and possibly waste solvents was burned in metal pans. No sampling or remedial action has taken place. The scope of this action is to characterize the soils of this group, compare the characterization data to site action levels, and, if necessary, perform a source removal action.

Group 300-2 UBC 331 and IHSS 300-134(S) Lithium Metal Destruction Site

B331 houses a vehicle maintenance garage and has a footprint of approximately 20,000 square feet. No characterization has been performed of the soils underlying the building. The Lithium Metal Destruction Site is located adjacent to the north side of B331 and includes a portion of the roof and adjacent parking lot. Lithium destruction took place at this site by placing the lithium on the ground and spraying it with water. The lithium was not radioactively contaminated. No documentation exists that details the fate of the constituents released to the environment. This group will be characterized after B331 is removed. Characterization will occur to determine whether a source removal action is necessary. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site.

Group 300-3 B371 Plutonium Recovery UBC

B371 Plutonium Recovery is one of five major facilities that make up the Plutonium Recovery and Waste Treatment complex. The building footprint is approximately 116,000 square feet. B371 housed the physical and chemical operations for recovering and refining plutonium metal and americium oxide. Current operations include material storage under an inert atmosphere, drum storage, and analytical and standards laboratories. The soils under B371 have not been characterized, and will be characterized after B371 is removed. The scope of this action is to characterize the soils, compare the characterization data to site action levels, and perform a source removal action.

Group 300-4 B374 Waste Treatment Facility UBC

B374 Waste Treatment Facility is located east of B371 and is one of five major facilities that make up the Plutonium Recovery and Waste Treatment complex. The building footprint is approximately 30,000 square feet. The B374 Waste Treatment Facility was designed to remove radioactive and chemical constituents from aqueous process effluents collected from operations throughout the Site. Processes include acid neutralization, radioactive decontamination, sludge solidification, and evaporation. Effluents are recycled or disposed of. Solid residues are monitored for radioactivity and packaged for offsite disposal. UBC 374 will be characterized after B374 is removed. Remediation of this site will depend on the characterization results; however, it is assumed that this site will require remediation.

Group 300-5 IHSS 206, Inactive Hazardous Waste Tank D-83

A 19,000-gallon, carbon steel tank is located at the northwest corner of B371 near Door 5 and was previously used for hazardous waste storage. Condensate water spilled from the tank when a line from the evaporator to the tank was disconnected. Tritium was found in this condensate water. Characterization will occur to determine whether a source removal action is necessary. Remediation of this site will depend on the characterization results, however, it is assumed that this site will be a NFA site.

Group 300-6 PAC 300-702, Pesticide Shed

The Pesticide Shed is B367 and was used to store and mix large quantities of pesticides and herbicides since 1952. Equipment and containers were cleaned and the water dumped onto the ground outside the building. An unknown number of spills also occurred over the years. In 1988, the unused chemicals were removed and disposed of and the area around the building was cleaned. Soil sampling was scheduled for fall 1988 but no documentation has been found that verifies that it was completed. Characterization will determine whether a source removal action is necessary. Remediation will depend on the characterization results; however, it is assumed that this site will be a NFA site.

2.1.4.4 GAC4 400 Area Closure Projects

Group 400-1 B439 UBC

B439 is located northeast of B440 with a footprint of approximately 5,000 square feet. Activities that were previously housed in B439 included an upholstery shop, Modification Center Machine Shop, Maintenance, Silver Recovery, Gamma Survey Instrumentation Maintenance, Painting, and Electronic Equipment Servicing. Scrap metal, wire, and wood have accumulated in the building but cannot be released due to uranium-238 contamination. It is assumed that this site will require remediation. UBC 439 will be characterized and remediated after B439 is removed.

Group 400-2 B440 UBC

B440 produced metal parts to support research and development operations in B439. Additionally, limited numbers of low-level radioactive waste drums were incidentally stored in and shipped from the building. The Modification Center was previously used to modify railcars, trucks, tractors, and trailers to support the safe and secure transport of nuclear materials within the DOE Complex. Radiological surveys were performed in the building and radioactive contamination levels were below unrestricted release limits. It is assumed that this site will require remediation. UBC 440 will be characterized and remediated after B440 is removed.

Group 400-3 UBCs for B444, B447, Tanks 4, 5, & 6, PACs 400-801 & 400-810, IHSSs 116.1, 116.2, 136.1, 136.2, 157.2, 182, 207 and 208

This project is to characterize and remediate the B444 and B447 UBCs along with other related sites after the 444 Area buildings are removed. The project will characterize soils around and under B444, then contaminated soils will be excavated. The buildings' process waste tanks will be removed during D&D and will require no additional characterization or remediation.

Group 400-4 PACs 400-803 and 400-804

This project includes the characterization and remediation of two PACs: 400-803, Miscellaneous Dumping, B446 Storm Drain; and 400-804, Road North of B460. In 1972, a contractor was found dumping paint, oil, and possible other materials into the storm drain immediately west of B446, which flowed along an open ditch. The contractor was directed to clean up the ditch, however, no documentation exists to verify if it was completed. In addition, the road north of B460 was damaged. Indirect counts up to 500 cpm and smears of up to 104 dpm were observed from the damaged area. The hot spots were covered with asphalt patching material. This action will characterize the soils in this group, compare the characterization data to site action levels, and, if necessary, perform a source removal action.

Group 400-5 IHSS 205, PACs 400-813 and 400-815

This project includes IHSS 205 –B460 Sump 3 and RCRA Unit No. 40.13, a fiberglass tank used as a staging area for acid wastes. In 1989, five to seven gallons of dilute nitric acid, hydrofluoric acid, and ammonia salts were released to a drain connected to an outdoor berm. RCRA Unit No. 40.12 is a regulated process waste collection tank in B460. Solutions containing 19 ppm cadmium and 13 ppm silver leaked under the concrete floor. RCRA Unit No. 40.15, Sump Tank ST-5, a hazardous process waste water collection tank in B460 overflowed into its secondary containment. The liquid waste contained 3 ppm cadmium. Potential under building contamination might exist due to leaks in the secondary containment for the tank. This area will be characterized and, if required, a remediation will be planned based on the characterization results.

Group 400-6 PAC 400-157.2

The Radioactive Site South is approximately 600' x 800', or 480,000 ft^2 and includes several other IHSSs and UBCs (UBC-439, UBC-440, UBC-444, UBC-460, and UBC-447). The soils surrounding B439, B440, B444, and B447 are known to contain low levels of uranium and chemical contamination. The soils around Buildings 439 and B440 also had possible infiltration of hydraulic oil and carbon tetrachloride. Numerous incidents indicate contamination releases to the area. The principal contaminants are uranium, beryllium, chlorinated hydrocarbon solvents, hydraulic oil, and carbon tetrachloride. It is estimated that an approximately 300,000 ft^2 area will be characterized and remediated under other IHSSs and UBCs. This leaves a potential area of contamination of 180,000 ft^2 that will be characterized then remediated.

Group 400-7 B442 UBC and Associated IHSSs

B442 UBC, the Filter Test Facility, and three nearby IHSSs are included in this group: IHSSs 129-Oil Leak, 157.1-Radioactive Site North Area, and 187-Sulfuric Acid Spill. B442 has a footprint of approximately 8,000 square feet and was originally used as a laundry for the garage, general maintenance and B444. The soil beneath the building is

potentially affected by both radioactive and chemical contaminants. About 1972, the building was converted to its present use as a filter test facility. The Radioactive Site North Area consists of contamination associated with spills and releases from laundering operations at B442. The contamination may include depleted uranium, enriched uranium, beryllium, and solvents with an estimated area of 200 square feet. The Sulfuric Acid Spill site consists of spills and leaks sulfuric acid, which were neutralized with lime. IHSS 129 consists of four, 11 by 20 feet underground oil storage tanks east of B443. The tanks leaked and are associated with spills. Tank 4 was emptied, cleaned and foamed as an accelerated action in 1996. These tanks and associated soils will be removed during D&D. Other soils for this group will be characterized, the characterization data compared to site action levels, and, if necessary, a source removal action will be performed.

Group 400-8 B441 UBC, IHSS 122-Tank 2, and Tank 3

This includes the B441 UBC and nearby IHSS-122, Under Concrete Tanks Area, which includes Tank 2 (T2), Concrete Waste Storage Tank and Tank 3 (T3), Concrete Waste Storage Tank and Steel Waste Storage Tank. The B441 footprint is approximately 17,000 ft^2. The building was originally used as a laboratory, and was converted in 1966 to an office building. Nitrates, volatiles, PCBs, and radioactive contaminants potentially affect the soil beneath the building. IHSS-122 is about 50' x 25' and consists of two interconnected underground waste storage tanks (T2 and T3) south of B441, and one above-grade tank directly above and considered part of T3. One 1,200-gallon release was documented in 1953. The tanks were abandoned in June 1982 and the underground tanks were decontaminated, filled with gravel, and covered with concrete. A south wing was added to B441, covering T2. Portions of the upper tank walls were removed at that time. The above-grade tank T3 was removed and the underground tank T3 was emptied, cleaned, and filled with polyurethane foam as part of an accelerated action in 1996. The tanks will be removed as part of D&D. The scope of this action is to characterize the soils underlying B441, T2 and T3, compare the characterization data to site action levels, and perform a source removal action if required.

Group 400-10 PAC 400-807, IHSS 161, and IHSS 120.2

The sandblasting area is located southwest of B444. A storage site approximately 200' x 200' is located west of B664 and may contain low-level residual contamination from plutonium and uranium resulting from punctured or leaking drums and boxes of solids and liquid wastes. A 1977 aerial radiometric survey indicated an area of elevated americium and gamma activity concentrations occurred near the northwest corner of B664. Soil was removed from this area in the early 1970s. The Fiberglass Area west of B664 is approximately 50' x 200', or 10,000 ft^2. These sites will be characterized and the data evaluated to determine if a remedial action is required. At this time, these IHSSs are all expected to be NFA due to the expected residual low-levels of contamination. The sandblasting area may require a remedial action.

2.1.4.5 GAC5 500 Area Closure Projects

Group 500-1 IHSSs 117.1, 186, and 197

The area northeast of B551 was used as a general warehouse storage yard until the early 1970s. Several incidents resulting in numerous releases to the environment are associated with the connected process waste lines south of B374 and associated Valve Vaults 11, 12, and 13. Remedial actions were taken to repair the various leaks and remove contaminated soils. Radiation levels were still above background when cleanup was completed. The 500 Area Scrap Metal Sites contained scrap metal components, mostly from the original plant construction program, which were buried in trenches west of B559. Some of the buried material could possibly be radioactively contaminated. The scope of this action is to characterize the soils of this group, compare the characterization data to site action levels, and, if necessary, perform a source removal action. Part of this area lies beneath the current Protected Area Fence. Characterization and remediation of the site will occur after removal of this fence.

Group 500-2 IHSS 158- Radioactive Site –B551

North of B551, the loading dock and helium storage areas of B553 were used for waste storage. Isolated spots of uranium contamination were found on the dock and in the helium storage area. The contamination spots were cleaned but no further documentation that details the fate of the constituents released to the environment exists. This area will be characterized after B551 is demolished. Remediation of this site will depend on the characterization results; however, it is assumed that this site will be a NFA site.

Group 500-3 UBC-559, UBC-528 IHSS-159, and Associated Tanks

UBCs for B559-Analytical Laboratory and B528-Temporary Waste Holding Building were combined with a nearby IHSS and three tank areas inside these buildings for characterization and remediation. The B559 footprint is approximately 35,000 ft^2. The original Pyrex process waste lines broke soon after installation. After 4 years, PVC pipe was installed as a replacement. Cores taken beneath the building confirmed some contamination in the soils beneath the building. B528 is south of B559 with a footprint of approximately 745 ft^2 and was used as a temporary holding point for process wastes. There is a 155' x 30' area on the southeast side of B559 identified as a Radioactive Site. The scope of this action is to characterize the soils for contamination, compare the characterization data to site action levels, and perform a source removal action.

Group 500-4 IHSS 117.2 Middle Site Chemical Storage

This project includes the characterization and remediation of IHSS 117.2, the Middle Site Chemical Storage, a chemical storage area east of B551 where several drums leaked an oily substance, and a 55-gallon drum of aluminum nitrate spilled. Characterization of the area will be followed by a source removal action.

Group 500-5 PAC 500-904

Characterization and remediation of PAC 500-904, Transformer Leak, an area with two transformers, numbers 223-1 and 223-2, located north of B549, which had leaked small amounts of oil prior to 1987. The total investigation area for this group is approximately 360 square feet. The scope of this action is to characterize the soils of this group, compare the characterization data to site action levels, and, if necessary, perform a source removal action.

Group 500-6 PAC 500-906 Asphalt Surface near B559

Approximately 1 gallon of wastewater was spilled at PAC 500-906 Asphalt Surface near B559 in 1993. This water exceeded Segment 5 stream standards for some analytes. The water contained carbon tetrachloride, trichloroethene, and 1,1-dichloroethylene. Oil-dry was used to absorb the water but the asphalt absorbed portions of the release. This area will be characterized with data compared to action levels. However, it is assumed that this site will be a NFA site.

Group 500-7 PAC 500-907, Tanker Truck Release of Hazardous Waste from Tank 231B

During a transfer of sludge from a stationary tank to a truck in 1994, approximately one-half pound of dried sludge was released to the soil, and four gallons of liquid were released to a secondary containment spill basin. The highest detected level of radioactive contamination was 651 dpm. Contaminated soil was containerized and the basin area decontaminated. The area will be characterized. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site.

2.1.4.6 GAC6 600 Area Closure Projects

Group 600-1 PAC 600-1001 UBCs B662 & B663

This group consists of the area under and around B662 and 663. B662 is 40 ft x 60 ft and B663 is 30 ft x 120 ft for an area of 6,000 ft^2. These buildings are constructed on slabs and were used for storage of drums containing liquid waste. Numerous incidents of leaking drums and spills have occurred and elevated levels of radionuclides have been detected both on the slab and in cracks in the slab. It is likely that radionuclides are present under the slab as well. It is also possible that volatile organic compounds (VOCs) are present at this PAC since liquid wastes were stored in the drums. There was also a gasoline spill at the site. The scope of this action is to characterize the soils, compare the characterization data to site action levels, and, if necessary, perform a source removal action.

Group 600-2, PAC 400-802 Storage Area, South of B334

The Storage Area, South of B334 was originally a metal or wooden structure built on a concrete slab. By 1955, the building had been removed but the concrete slab was still used for storage. Drums containing depleted uranium in oil leaked onto the slab. The drums were removed and the slab cleaned in 1956 with tetrachloroethene but contamination up to 10,000 dpm remained. The area was then used as equipment storage. By 1957 low-level radioactivity extended to the fuel storage tank located south of B551. This area will be characterized after buildings T452A, T452B, T452F, and T452G are removed. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site. The slab will need to be removed or buried by at least 3 feet of fill prior to Site closure.

Group 600-3 IHSS 120.1 Fiberglassing Area North of B664

This area, where waste packing boxes were fiberglassed, is north of B664. Some polyester resin, epoxy components and solvents may have spilled at this location. In 1977, aerial radiological measurements detected elevated gamma-radiation and americium activities in the vicinity of this site. No documentation has been found that provides an explanation or confirms this data. This area will be characterized after B664 is removed and these results will determine whether a source removal is required. It is assumed that this site will be a NFA site.

Group 600-4 IHSS 160 - B444 Parking Lot

Prior to installation of the parking lot for B444, the area was used to store drummed and boxed wastes prior to off-site disposal, including the waste resulting from the May 1969 fire in B776 and B777. Based on surficial soil sampling, a 50' x 100' area in the northeast corner is contaminated with plutonium. This site will be characterized then remediated based on characterization results.

Group 600-5, PAC 600-1004, Central Avenue Ditch Cleaning Incident

When the Central Avenue Ditch was cleaned out in September 1993, soil and sediment removed from the Ditch was spread into IHSS 152. No radiological contamination was observed in the Central Avenue Ditch soils. However, this area must be characterized, and remediation of this site will depend on the characterization results. It is assumed that this site will be a NFA site.

Group 600-6 PAC 600-1005, Former Pesticide Storage Area

The former pesticide storage area is located several hundred feet north of B850 in what is currently parking lot No. 881. Around 1982, the shed was moved to west and south of B371. Pesticides may have been spilled at the former locations. This area must be

characterized, and remediation of this site will depend on the characterization results. It is assumed that this site will be a NFA site.

2.1.4.7 GAC7 700 Area Closure Projects

Group 700-1 PAC 700-1115

Between 10 and 15 gallons of diesel fuel spilled onto the asphalt near the northeast corner of B708 in 1993 while refueling the emergency generator. Fuel has since been noted in the subsurface soils. The scope of this action is to characterize the soils, compare the characterization data to the site action levels, and perform source removal, if necessary.

Group 700-2 UBC-707, UBC-731, Tanks T-11 & T-30

This project includes the B707 UBC, the Main Plutonium Components Production Facility, B731 UBC, the B707 Process Waste Pit, and Tanks T-11 and T-30 in B731. The B707 footprint is approximately 108,000 square feet. The building houses general fabrication and assembly operations for plutonium. During construction, excavation of the area revealed that the process waste drain from B881 was corroded and leaking. The entire footprint of the building is considered contaminated and will require characterization and remediation. B731 is approximately 213 square feet, is located east of B707 and houses the process waste tanks for B707. In 1991, these process waste tanks overflowed and 750 gallons of process waste went into the secondary containment. The possibility exists that the soils near B731 are contaminated. Tanks T-11 and T-30 are located in B731 and will be removed during D&D. The scope of this action is to characterize the soils underlying this group, compare the characterization data to site action levels, and perform a source removal action.

Group 700-3 UBC-776, UBC-777, UBC-778, UBC-701; IHSSs 118.1, 118.2, 131, 144, 150.2 (south), 150.4, 150.7; PACs 700-1100, 700-1116; and Tanks T-9, T-10, and T-18

This group includes the UBCs for the connected Buildings 776, 777, and 778, nearby B701, and numerous nearby or underlying associated IHSSs, PACs and tanks. B776 was used as a plutonium foundry and has a footprint of approximately 72,000 square feet. A fire on May 11, 1969 released plutonium to all of Buildings 776 and 777 and areas of Buildings 771, 778, and 779. In 1964, a glove box explosion resulted in release of plutonium to the building interior and exterior. In 1964, contaminated carbon tetrachloride overflowed from a lathe box into a crack in the floor. In 1989, liquid from process waste tanks was found on the floor and in a bermed area. B777 has a footprint of approximately 74,000 square feet and was used for production of plutonium components until 1969. B778 has a footprint of approximately 33,500 square feet. B701 has a footprint of approximately 5,800 square feet and originally housed a carpentry and paint shop. In 1972, process waste from the laundry waste holding tanks backed up into a toilet and sink in this building. Tanks, process waste lines and utilities within the

buildings will be removed during D&D. The scope of this action is to characterize the underlying soils, compare the data to site action levels and perform a source removal.

Group 700-4 UBC-771, UBC-774; IHSSs 124.1, 124.2, 124.3, 125, 126.1, 126.2, 139.2, 146.1, 146.2, 146.3, 146.4, , 46.5, 146.6, 150.1, 150.2 (north), 150.3, 163.1, 163 215; and Tanks T-8, T-12, T-13, T-14, T-15, T-16, T-17, T-36, and T-37

This group includes the UBCs for the connected Buildings 771 and 774 and a large number of nearby/underlying IHSSs, PACs and Tanks. The B771 footprint is approximately 90,000 square feet. This was the original plutonium component production facility. In 1957, the plutonium components production operations were transferred to B776 and 777. The building was used for chemical recovery of plutonium and americium. The B774 footprint is approximately 15,500 square feet and the building was used for the treatment of radioactive aqueous wastes, waste oils, and non-radioactive waste photographic solutions. There were numerous known or suspected releases, spills, and leaks of radioactive, organic, and inorganic contamination. Tanks, process waste lines and utilities within the building will be removed during D&D. The scope of this action is to characterize the soils underlying this group, compare the characterization data to site action levels, and perform a source removal.

Group 700-5 UBC-770

This project includes characterization and remediation of the UBC for B770, Waste Storage Facility. The building footprint is approximately 3,000 square feet and houses waste storage facilities for radioactive operations. In 1972, a punctured scrap box and drum resulted in up to 200,000 dpm/100 square centimeters in and around the building. After the building and slab are removed by D&D, the soils underlying and around B770 will be characterized, compared to action levels, and a source removal action will be performed if necessary.

Group 700-6 IHSS 137 Cooling Tower Blowdown Buildings 712 and 713 and IHSS 139.1 (S) Caustic/Acid Spills: Hydroxide Tank Area

The Cooling Tower Blowdown Buildings 712 and 713 are associated with B776. A leak from the cooling towers was reported at between 5 and 20 gallons per minute for several months. Additional potential contamination may have occurred from cooling water blowing off the towers onto the surrounding area. The potential contaminant of concern is chromium. An above ground 5,400 gallon potassium hydroxide tank south of B771 has leaked in the past and caustic may have seeped through the soil and infiltrated underneath the building. Contaminated soil was removed in 1989, but there is no documentation of response to earlier leaks. The area will be characterized after Buildings 712, 713, 714, 714A, 702, and 703 are removed. Remediation of this site will depend on the characterization results; however, it is assumed that this site will be a NFA site.

Group 700-7 UBC-779; IHSSs 138, 150.6, 150.8; PAC 700-1105; and Tanks T-19, T-20, T-38

This project includes B779 UBC, the Main Plutonium Components Production Facility; three associated IHSSs; one associated PAC; and three associated tanks. The B779 footprint is approximately 44,000 square feet. The building housed minor production and plutonium recovery operations but was primarily a research and development facility. B779 was erected over one of the original solar evaporation ponds. During excavation in 1962, radioactive readings from 11-150 dpm/l, primarily from uranium, were noted. In 1969, an improperly opened waste drum resulted in the spread of radioactive material throughout the building and adjacent grounds. In addition, 400 gallons of water containing chromium and radionuclides leaked from a broken underground pipeline from the Cooling Tower Blowdown B779. An estimated 1,000 gallons of cooling water also overflowed from B783 cooling tower onto the ground. A small amount of radioactive contamination was spread to the east and south of the building by a pedestrian, but the contaminated soil was removed. Transformers 779-1/779-2 on the northeast side of B779 leaked PCB containing oil and were moved. Various tanks also leaked or overflowed in the building. The scope of this action is to characterize the soils underlying the building and associated IHSSs, PACs and Tanks, compare the characterization data to site action levels, and perform a source removal action. D&D removed all building structures down to the slab. ER will remove the slab and foundation structures to 3 feet below grade.

Group 700-8 IHSS 214-750 Pad Pondcrete and Saltcrete Storage Unit 25

The 750 Pad Pondcrete and Saltcrete Storage Unit is 6 storage tents located east of Building 750. Pondcrete and saltcrete were spilled at the pad on several occasions. Run-off water from the storage area has shown elevated nitrate and gross beta levels. Spilled pondcrete and saltcrete was cleaned from the pad surface and repackaged. No characterization data exists. The area is a RCRA unit and will be characterized after the 750 Pad Tents are removed. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site.

Group 700-10 PAC 700-1101 - Laundry Tank Overflow

The laundry tank overflow area is located west of B778 in B732. The laundry wastewater tank overflowed into the tank pit and was released to the environment. Because of the nature of building activities, it is probable that this material was low-level waste. The area will be characterized. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site.

Group 700-11 PAC 700-1108, Bowman's Pond Remediation and IHSS 139.1 (N), Hydroxide Tank Area

Bowman's Pond is a small pond north of B774. Footing drains from both B771 and 774 daylight in the general location of the pond. Physical failure of process waste storage

tanks south of B774 is a major contributor of chemical and radioactive contamination on the soil around B774 and it was suspected that some minor leakage from these tanks has seeped to the building footing drain tiles. A leaking process waste line located southeast of B774 and a storm drain that daylights on the south side of Buildings 771 and 774 may have also contributed to the contamination. Based on water samples collected from Bowman's Pond, the soil may be contaminated with radionuclides, nitrate/nitrite, sodium hydroxide, and PCBs. Characterization of the pond was completed in FY99 and showed elevated PCB levels. If a remedial action is required, this pond will be remediated as an accelerated action. The Hydroxide Tank Area is grouped with Bowman's Pond and is assumed to be an NFA site.

Group 700-12 PAC 700-1106, Process Waste Spill – Portal 1

Approximately 10 gallons of process waste water spilled from a tank truck on to the street at the entrance to Portal 1 in 1986. It was determined at the time of the incident that there was no radioactivity on the street. No documentation was found that further detailed responses to this occurrence. The area will be characterized after the Protected Area fence is removed. Remediation of this site will depend on the characterization results however; it is assumed that this site will be a NFA site.

2.1.4.8 GAC8 800 Area Closure Projects

Group 800-1 UBC-865, IHSS-1204, IHSS-1212, and Tank T-23

This project includes B865 UBC - Materials Process Building, two nearby IHSSs, and Tank T-23. This building was used for fabrication, processing and testing of metal parts. Depleted uranium and beryllium were processed in this building. The building footprint is approximately 39,000 ft^2 and overlays IHSS 179, the B865 Drum Storage Area, which is included in the UBC 865 area. The T23 area is the Electronic Beam Furnace Sump in B865 that will be removed during D&D. There have been no documented releases and, based on a visual inspection in November 1986, there was no visual evidence of spills. Due to the use of B865, the soil beneath the building may be potentially affected by volatiles, beryllium, and radioactive wastes. B866 holds five process waste tanks that service B865 and 889. Contamination releases originating from the filling of the tanks have been documented. The scope of this action is to characterize the soils, compare the characterization data to site action levels, and perform a source removal action.

Group 800-2 UBC-881; PAC 800-1205; and Tank T-39

This project includes the B881 UBC - Laboratory and Office Support Operations; one related PAC, 800-1205, B881 East Dock; and Tank T-39. B881 was an enriched uranium component production building until 1969, and then it was converted to a non-radioactive metals fabrication facility. In 1984, B881 was converted to various analytical support and administrative functions. B881's footprint is approximately 86,000 square feet and it

is believed that there are leaking process waste lines under the building. The B881 East Dock may have been contaminated in 1960, but there is no documentation of what may have caused the contamination. Tank T-39 was four above-ground 250-gallon steel process waste tanks located in Room 114A of B881 that were removed in the mid-1970s. The room will be characterized and decontaminated under the D&D. This scope addresses only the possible UBC. The scope of this action is to characterize the soils, compare the characterization data to site action levels, and, if necessary, perform a source removal action.

Group 800-3 B883 UBC, PACs 800-1200 , 800-1201, Tanks 25 & 26

This project includes the B883 UBC - Roll & Form Building, two nearby PACs, and two Tank Locations, consisting of five tanks inside B883. The building footprint is approximately 51,000 square feet and the building was used for uranium fabrication operations. Beryllium metal was also rolled and machined in this building. In 1989, process wastewater was noted to be overflowing from a tank and some water flowed under the wall. The Radioactive Site South of B883 consists of radioactive contamination of unspecified origin. Studies conducted in 1958 identified contamination, including significant plutonium contamination in the area between Buildings 883 and 881. No documentation of cleanup activities was found. Field surveys conducted during installation of a telephone line in 1978 identified several "hot spots" in the same area. Removal of contaminated soil in two small areas near B883 was completed in April 1981. The tanks are above ground tanks in the basement that will be removed during D&D activities. The scope of this action is to characterize the soils adjacent to and underlying B883, compare the data to site action levels and, if necessary, perform a source removal.

Group 800-4 UBC-886; IHSS 164.2 Radioactive Site 800 Area Site No. 2 B886 Spills; and Tanks T-21, T-22, T-27

This project includes the B886 UBC - Critical Mass Laboratory; one associated IHSS; and three associated tanks. The IHSS is 164.2, the Radioactive Site 800 Area Site No. 2 B886 Spills. The building housed the Critical Mass Laboratory, where criticality experiments were performed, along with offices and a small electronics/machine shop. Enriched uranium solutions, solid enriched uranium, and plutonium metal were used in this building. Tanks, T-21, T-22, and T-27 are located in the basement of B886. The building footprint is approximately 14,000 square feet. The area around the building is a radioactive site, however, there is no documentation of spills.

B828, the B886 Process Waste Pit, contains Tank T-21, an open top 250-gallon concrete sump and T-22, two 250-gallon above-grade steel tanks. T-21 contained incidental overflow from T-22 and groundwater infiltration and was abandoned in 1978. There were no known releases at this location. T-22 contained uranium, plutonium, and fissile uranium waste in the past, but is abandoned. Tank T-27 was a 500-gallon portable steel tank called the Portable Liquid Dumpster that was located on a concrete pad outside of

B886 and used to store and transfer process waste. When T-27 was decontaminated and removed, no radioactive contamination was found on the pad. The tanks will be closed and removed by D&D. This action will characterize the soils, compare characterization data to site action levels, and perform a source removal action.

Group 800-5 UBC-887; IHSS 177- B885 Drum and Paint Storage; and Tanks T-24 and T-32

This project includes B887 UBC, the Process and Sanitary Waste Tanks; one nearby IHSS 177, B885 Drum and Paint Storage; and two Tanks T-24 and T-32. B887 houses Tanks T-24 and T-32 process and sanitary waste holding tanks and has a footprint of approximately 350 square feet. In 1989, the process waste tanks overflowed onto the floor. These tanks will be removed with the slab during D&D. B885 Drum and Paint Storage is located south of B881. Paint cans and drums were stored haphazardly and rainwater was allowed to flow through the building. There are records of inadvertent dumping of radioactive contaminated oil sludge into an open top dumpster at B885. It is not clear if there was a release to the environment. Characterization of the UBC-887 or IHSS 177 has not taken place to date. The scope of this action is to characterize the soils underlying B887 and IHSS 177 for contamination, compare the characterization data to site action levels, and, if necessary, perform a source removal action.

Group 800-6 UBC-889; IHSS 164.3 Radioactive Site 800 Area Site #2; and Tanks T-28, T-40

B889 housed decontamination and waste reduction operations for wastes from outside the PA. IHSS 164.3 – Radioactive Site 800 Area Site #2, B889 Storage Pad was a storage pad for uranium contaminated equipment and drums. In 1982, a waste drum containing uranium chips spontaneously ignited. In 1983, the cover over nine uranium contaminated machine tools stored outside blew off. In 1984, a waste drum containing uranium chips caught fire. Tank T-28, located in B889, consists of two open top 1,000-gallon concrete sumps that contained decontamination wastewater. B889 was demolished in 1996 but the tanks remain. Tank T-40 is two 400-gallon underground concrete tanks located in a vault west of B889 and the tanks were abandoned in 1982. The pumps and piping were removed and the tanks were decontaminated and abandoned. The tanks were filled with polyurethane foam in 1996. Stormwater runoff from the area is some of the most actinide-contaminated water on site ranging from 3 pCi/L to 90 pCi/L Pu-239, 240. The scope of this action is to D&D the tanks, characterize the soils, compare the data to action levels and perform a source removal and/or stabilize surface contamination.

2.1.4.9 GAC9 900 Area Closure Projects

Group 900-1, UBC 991; IHSSs 173; 184; and PAC 900-1301

B991 was the first building at Rocky Flats. Its primary function was assembly of weapons components, shipping, receiving and storage. Four large underground storage vaults and tunnels connect to the building and comprise the 991 UBC. The vaults and tunnels are B996, B997, B998, and B999. On the south dock of the building, small parts and equipment were routinely washed with solvents and radioactively-contaminated equipment and drums were steam cleaned. An area approximately 50 ft wide along the south side of B991 was used for the storage of radioactively contaminated drums and materials. Volatile organic compounds were previously identified in these areas. Characterization of this area will occur during and immediately follow the D&D activities. The characterization data will be compared to site action levels, and if necessary, a source removal will be performed.

Group 900-3, IHSS 213 904 Pad

The 904 Pad is located west of the 903 Pad and south of Central Avenue. This area is currently used for storage of pondcrete, saltcrete, sewage sludge, and miscellaneous materials in cargo containers inside of tents. Several small spills have occurred but were not reportable quantities. Small amounts of leakage under the berm have been observed and the berms have overflowed with runoff during periods of heavy rainfall. Elevated levels of gross alpha, and beta activity and nitrate have been noted in the runoff. The area will be characterized after the 904 Pad tents are removed. Remediation of this site will depend on the characterization results. It is assumed that this will be an NFA site.

Group 900-Area Group IHSS 175 Contractor Storage Facility, PAC-1308 Gasoline Spill Outside of B980, PAC-1307 Explosive Bonding Pit, PAC-1309 OU 2 Field Treatability Unit Spill, PAC-1311 Septic Tanks East of B991, PAC-1312 OU 2 Water Spill, and PAC-1313 Seep Area Near OU 2

IHSS 175 Contractor Storage Facility is located south of B980 and was used for the storage of 55-gallon drums. Drums generally contained waste oils and thinners. No documentation was found identifying leaks or spills although soil staining was noted. The gasoline spill is located southeast of B980. Approximately 0.7 gallons of gasoline was released on the ground. The contaminated soil was excavated and removed. These areas will be characterized and it is assumed that these sites will be NFA. The Explosive Bonding Pit, Operable Unit (OU) 2 Field Treatability Unit Spill, Septic Tanks East of B991, OU 2 Water Spill, and Seep Area Near OU 2 Influent were previously characterized and submitted to the regulatory agencies as NFA recommendations in 1999.

2.1.4.10 GACA Industrial Area Caps

Group 000-1 Solar Evaporation Ponds

The Solar Evaporation Ponds (SEP) are located in the northeastern quadrant of the Protected Area and were used to evaporate liquid wastes. The process waste lines that discharge into the SEP are considered under this scope of work along with the Swinerton and Walberg (S&W) Contractor Storage Yard and the Triangle Area. Additional characterization is planned after D&D and Resource Conservation and Recovery Act (RCRA) closure of B964. The Triangle Area-IHSS 165 was previously characterized; no further investigations are anticipated and it is assumed that it will be a NFA. The remaining activities are to characterize the process waste lines that discharged to the ponds, and either remove them or close them in place by foaming depending on their contamination levels. After disposition of the process waste lines the Solar Ponds area will be closed in place by backfilling the ponds to grade. The area will then be available for use as a staging area if necessary. The baseline assumption is that an evapo-transpiration cap will be installed later to cover the area. This action will cover the area of PAC 900-1310, a spill of interceptor trench water at the north side of pond 207B North. However, the need for this cap will be evaluated further in the project life.

Group SW-2: IHSSs 115-Original Sanitary Landfill and 196-Water Treatment Plant Backwash Pond

This activity will close the Original Landfill and the overlying Water Treatment Plant Backwash Pond. An estimated 2 million cubic feet of miscellaneous wastes are buried in the landfill including construction-related debris, waste metal, glass, solvents, paints, paint thinners, oil, pesticides, and cleaners. The landfill may also contain beryllium, uranium, lead, and chromium. It was reported that ash containing an estimated 20 kilograms of depleted uranium was placed in the landfill when 60 kilograms of uranium were incinerated and only 40 kilograms were recovered. There is erosion and sloughing on the south side of the landfill closest to Woman Creek. The Water Treatment Plant Backwash Pond is located on top of the landfill and was an evaporation/settling pond for backflushing sand filters from the B124 water treatment facility. The scope of this activity is to compare the characterization data to site action levels, design a cover and buttress wall to prevent erosion and sloughing, perform hot spot removal actions for areas above Tier 1 action levels, construct the cover and buttress wall, and prepare a Closeout Report. The landfill will be closed using an evapo-transpiration cover. Post-closure maintenance will be required, but is not funded in this activity.

2.1.4.11 GACB Industrial Area Miscellaneous Projects

Preliminary Characterization 123 UBC and 886 UBC

This project includes final characterization of the B123 UBC and preliminary characterization of B886 UBC prior to demolition. The investigation is funded by EM50 and is in addition to the baseline scope for Groups 100-4 and 800-4. The purpose of this

project is to demonstrate the feasibility of using horizontal drilling techniques with real time monitoring at RFETS and to determine whether UBC exists at these locations.

Industrial Area Strategy and Characterization

The IA Strategy and Characterization project will provide the coordination for characterization of IHSSs, PACs and UBCs in the IA. Specific activities include development of Data Quality Objectives (DQOs), development of the sampling and analysis plan, data validation and data management, quality assurance, yearly IA characterization report, overall schedule and project management coordination, regulatory agency interface, and public meeting support.

Site Water Balance - Hydrologic Basis for Closure

Designing the final Site configuration requires quantifying Site hydrology for present and planned future conditions. A Site Water Balance will be completed with sufficient detail to assist with design of Site closure strategies and long-term natural resources management. Hydrologic modification of the Site will affect the extent to which present and future D&D and environmental restoration projects must be implemented. The Site Water Balance will evaluate the surface hydrology to develop management options for the final Site configuration, model the Site hydrogeology and impacts to surface water from current and future groundwater fluxes, and evaluate the closure options such as building foundation removal, pond removal or operational changes, wetlands options and final cap/cover configuration.

Miscellaneous Foundation Removal

Current D&D activities will remove structural materials within 3 feet of the existing ground surface, including building slabs and foundations. In the event that D&D of a facility with a high potential for UBC occurs well before scheduled soil remedial actions, ER may specify that building slabs be left in place to provide continued containment on probable contaminated soil. The scope of this activity consists of the removal of foundations not removed during D&D including those for Building 123, Building 779, Building 889 and several small guard shacks. Because all other building foundations that will require removal have not yet been identified, it was assumed that six other foundations for similar size buildings would require removal. It is assumed that all nine building foundations will be removed using one set of planning documents and one procurement action is required, and that none of the slabs are contaminated.

Land Configuration Design Basis

This activity will develop the data to design the final land surface configuration for RFETS closure based on land use designations and surface water protection established by RFCA. Several ongoing studies and data gathering efforts will contribute to the

design criteria for final surface configuration. These include the actinide migration study, the soil erosion study, water balance study, groundwater monitoring and air monitoring. Additional information will also be required and obtained under this activity to support construction of a final land surface configuration that will include final configuration of IA, surrounding areas of the BZ and the drainages. This information will be used for the Interim CAD/ROD.

Regrade and Revegetate

The scope for this activity includes the final re-contouring, regrading and revegetation of the IA, surrounding areas of the BZ and the drainages as required after D&D and ER work is completed. Buildings and infrastructure such as roads, parking lots, stormwater drainage control and wastewater impoundments have altered the topography of the Site. As these structures are removed, the resulting topography will promote erosion and water runoff that will impact earlier remediation actions, natural drainage systems and surface water protection standards on site and at the Site boundary. The regrade and revegetation objective is to develop and implement an engineered final land surface configuration that will be protective of human health and the environment and will meet surface water protection standards consistent with future land use.

Road Removal

This project includes the removal of the site wide asphalt pavements including paved roads and parking areas that would then be disposed as uncontaminated fill. The east and west access roads and north perimeter road will be left to allow access to monitoring locations.

2.2 Boundaries

Appendix H contains the ERATL, which provides a complete listing of the IHSSs, PACs, UBCs, and Plumes as well as the current status and assumed actions required. The ERATL is updated, as required, to accurately reflect the status and current plan for addressing each of the release sites.

ER scope is closely linked with decommissioning scope. Decommissioning will interface with ER to achieve an integrated process to minimize risk to workers and the environment, minimize generation of remediation wastes, streamline technical processes and reduce project costs. Project interface points are as follows:

- Generally, the ER schedule will be integrated with decommissioning schedules. ER characterization will start during facility deactivation or decommissioning.
- Whenever possible, the subcontractor with primary responsibility for facility demolition will also conduct remediation. Demolition and remediation will proceed as

an uninterrupted two-phase operation culminating in closeout of the associated IHSSs, PACs and UBCs.

- Decommissioning will remove all electrical and water utilities associated with the facilities. Underground utilities will be left in a stable condition outside of the facility footprint, and a map maintained annotating the locations and sources of these utilities.
- Decommissioning will remove new process waste lines, tanks and any other lines associated with the process waste transfer system within or as part of the facilities, and will blank off the process waste lines at the facility perimeter. A map will be maintained with the annotated locations and sources of the process lines.
- Decommissioning will remove old process waste lines within or as part of the facilities, and ensure that any remaining lines at the facility perimeter are blocked. A map will be maintained with the annotated locations and sources of the process lines.
- Decommissioning will flush and remove sanitary sewer lines, tanks and equipment associated with facilities to the isolation valve of the main system line. The flushing conducted by Decommissioning will consist of flushing the system with clean water.
- In general, Decommissioning will remove any structural material within 3 feet of the existing ground surface. This will include facility slabs and foundations unless otherwise required by ER based on remediation requirements.
- Decommissioning will remove any structures below 3 feet of the existing ground surface when the structure prevents access to underlying soil that requires remediation, or when the structure cannot be released for unrestricted use. The removal will include the foundation and at least three feet of the footings/pilings. Any remaining footings/pilings will be removed during ER activities.
- ER will characterize and/or remediate contaminated soil and associated process waste lines beneath slabs.
- ER will remove sidewalls of facilities below the 3-foot mark if the wall exterior is contaminated to the extent that the wall must be removed to meet remediation goals.
- ER will remove slabs that are below the 3-foot mark if necessary to remediate UBC.
- When decommissioning of a facility with a high potential for UBC occurs well before scheduled soil remedial actions, ER may specify that facility slabs be left in place to provide continued containment on probable contaminated soil. This decision will be made on a case-by-case basis and will be documented in writing with concurrence from both groups and will be included in the project administrative record.
- In the event that a schedule gap occurs between the decommissioning and ER phases as described above, the Site's landlord organization will provide surveillance and maintenance of the facility slab during the interim. The hand-off from decommissioning to the landlord organization will be documented in writing with concurrence by decommissioning, ER and the landlord organization.
- If the dispositioning of a facility involves groundwater intrusion, sampling will be conducted by ER to determine if the groundwater is contaminated. If the groundwater is contaminated, an assessment will be made by ER to determine if the groundwater could impact surface water. If the water is contaminated, but there is no threat to surface water protection standards, the groundwater will be left in the subsurface

structure with appropriate controls to protect the health and safety of workers and the public until remediation by ER. If the water is contaminated and is a threat to surface water protection standards, the water will be pumped to a treatment facility until remediated by ER. The following table lists potential conditions and actions with respect to groundwater and surface water actions during decommissioning. Project-specific controls will be detailed in the Demolition Plan and IWCP package for the demolition activity. ER actions, details, and requirements will be detailed in the ER RSOP.

Matrix of Groundwater Actions	
Condition	**Action**
Groundwater, surface water, utility water or precipitation is collecting in the excavation or work areas during decommissioning, and it must be managed to ensure safe work areas and protection of the environment.	As required, temporarily manage water as per the Incidental Water Program during D&D and/or ER activities.
Prior to decommissioning activities, water is collecting in sumps, vaults, or other below ground structures and pumped to Site treatment facilities.	This water will continue to be collected and treated at Building 374 or other Site facilities as required to protect surface water and to maintain appropriate work environments until D&D is completed and/or until ER work is completed as required.
Prior to decommissioning activities, water is collecting in sumps, vaults, or other below ground structures but is not pumped or treated.	Water will not be collected, removed, or treated unless required to protect surface water quality or workers.
There are potential surface water impacts from foundation drains	The pathway to surface water from foundation drains will be removed by ER, either through drain removal, grouting or other effective mechanism unless these are disturbed during D&D. In that case, D&D will remove the foundation drains.
Potential future surface water impacts from D&D activities	Pathways to surface water from building D&D activities will be monitored by the Surface Water and Groundwater Monitoring Programs as required in the Integrated Monitoring Plan.

The second major boundary for ER is with the Integrated Monitoring Program (IMP). The IMP was established under RFCA and requires that the Site collects and reports data required to ensure the protection of human health and the environment. Under the IMP Plan, the Site conducts regular and periodic monitoring of surface water, groundwater, air and ecological parameters. Monitoring consists of field sampling at specified locations and frequencies, and comparison of sample values to established compliance values. Monitoring data is reported to internal organizations and the regulatory agencies.

The IMP's role is compliance and has two interface points with ER. First, monitoring can indicate potential source locations for contaminants. Once indicated, ER conducts further sampling to confirm the presence or absence of a source. Secondly, the IMP monitors compliance parameters during remediation activities. Exceedances or potential exceedances are reported immediately to the ER project manager who modifies the project to bring it into compliance.

2.2.1 Technical Assumptions

In addition to what is stated above, following are the technical assumptions used to develop the baseline.

2.2.1.1 Overall Assumptions

The Site will maintain compliance with applicable laws, regulations, and legally binding agreements in force at the time of the Kaiser-Hill/DOE contract.

All IHSSs will be remediated or dispositioned as per the Rocky Flats Cleanup Agreement (RFCA), amended as of 10/01/99. The Site will comply with negotiated RFCA milestones.

Contamination sites were grouped together for characterization and remediation to the extent practical to maximize documentation and operational efficiency.

ER soil action levels will conform to those in the 10/01/99 revision of RFCA.

Both the Buffer Zone and Industrial Area will be remediated to Tier 1 action levels. All remedial actions will be performed as accelerated actions (including caps).

Actions will not be required for contamination above Tier 1 if there is no exposure pathway. Deep Under Building Contamination and portions of the OPWL, etc that do not have the potential to impact surface water will not be remediated.

Remediation projects will return all soils with radioactivity less than the Tier 1 levels, as defined in RFCA, Attachment 5, to the remediation site.

Engineered caps are an integral part of the Site's environmental closure strategy, and the regulatory agencies will agree to the use of evapo-transpiration caps.

The designated land use for the Industrial Area will be limited industrial use and open space. The designated land use for the Buffer Zone will be open space.

Site water treatment facilities will remain functional during the timeframe when water generated by ER projects will require treatment. These costs are not included in the ER baseline.

Remediation wastes will be removed from the project sites except for those that can be left in place, recycled, or used as fill materials. Road materials and uncontaminated foundation slabs will be used as fill for deep basements.

Waste treatment, transportation and disposal costs are not included in the ER baseline, but are included in the Material Stewardship baseline.

Monitoring costs for surface water and groundwater are not included in the project baseline.

Building foundations, utilities, other remaining structures, paved roads and/or parking lots will be removed or covered by a minimum of three feet of fill after final grade.

Surface water onsite will meet health-based standards based on open space use calculated using methodology and toxicity assumptions utilized for the July 19, 1996 surface water action level (in RFCA).

Water leaving the site in Woman and Walnut Creeks will meet the water quality standards established as of 10/01/99 by the Colorado Water Quality Control Commission.

The NFA decision process and documentation will follow guidance in Attachment 6 of RFCA.

Remedial actions and no further action decisions in the ER baseline were scoped and developed using available information. When additional data are obtained, it is anticipated that some of these decisions will also change.

Contract and baseline estimates of waste volumes from ER projects are based on available historical records and data. These estimates will change as more data are gathered.

The east and west access roads and north perimeter road will be left after site closure to allow access to monitoring locations.

2.2.1.2 Project Specific Assumptions

The 903 Pad will be remediated to Tier 1 levels. Enhancements of the South Interceptor Ditch will allow the site to meet health-based standards based on open space use calculated using methodology and toxicity assumptions utilized for the July 19, 1996 surface water action level (in RFCA).

The Present Landfill and Original Landfill caps will be evapo-transpiration caps. The Present Landfill cap will be minimized and will not cover the Landfill Pond area.

The Solar Ponds area will be scoped to first be flattened for use as a staging area, then capped later if necessary with an evapo-transpiration cap.

The present dams will remain past site closure; no new wetlands will be constructed or acquired. The dams will be converted from an actively managed system to a flow-through system.

Contaminated sediments will be removed from Ponds B-1, B-2 and B-3 to meet surface water standards.

The treatment system for the Industrial Area Plume will be similar to that for the East Trenches Plume.

The final site configuration will not match the original land surface. Rather, the surface configuration will be engineered to meet the esthetics, surface water protection standards, and exposure values consistent with open space land use. Fence posts, sign posts and utility poles are not considered structures. These will be cut off at or below ground level and the remaining portions will not be removed or covered with 3 feet of fill unless necessary for other reasons.

2.2.1.3 Industrial Area Assumptions

One overall sampling plan will be developed for IA characterization. Sampling, health and safety, and QA plans will be addenda to the IA Sampling and Analysis Plan and will be developed as needed for specific projects.

DQOs will be developed and approved before the sampling plan is developed.

Characterization of and remedial planning for UBCs, PACs and IHSSs beneath or near structures will be performed during the last year of D&D of the facility.

OPWL areas beneath buildings will be characterized as part of the UBC characterization. There will be areas of OPWL that are not characterized.

2.3 Budget

The baseline budget is presented in Appendix B. The working budget is presented in Appendix C.

2.4 Schedule

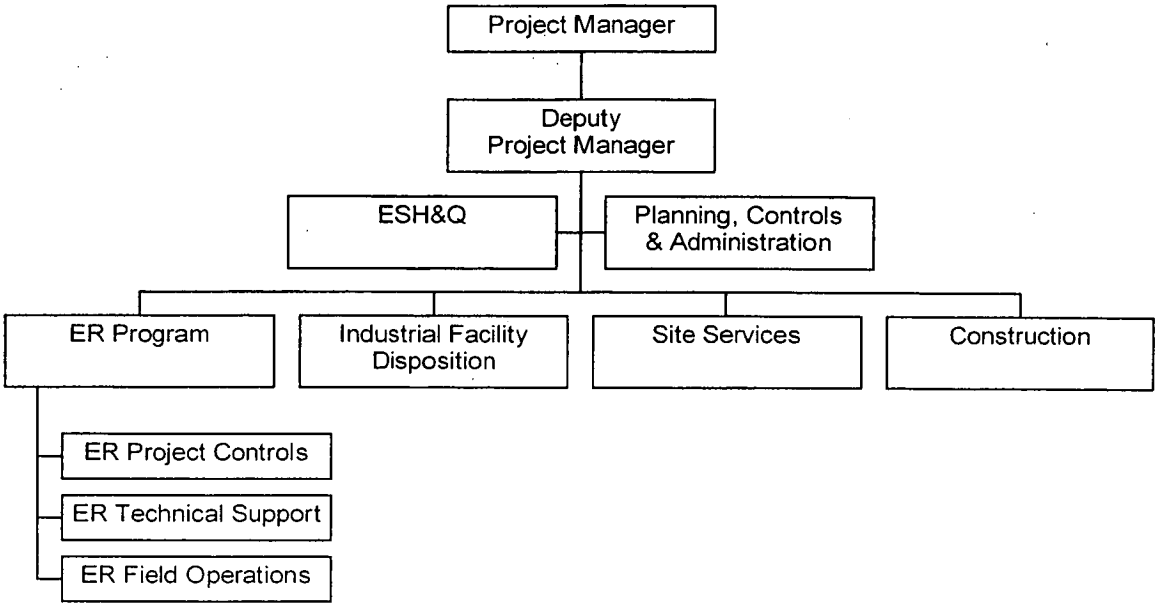
The baseline schedule is presented in Appendix D. The working schedule is presented in Appendix E.

2.5 Organization And Responsibilities

2.5.1 Organization / Resources

Following is the organization chart for Remediation, Industrial and Site Services Project.

Remediation, Industrial and Site Services Organization Chart



2.5.2 Roles and Responsibilities and Interfaces

The roles and responsibilities of the ER Project along with its interfaces with other projects and within this project are presented below. Appendix I contains additional information on the roles and responsibilities for all of Kaiser Hill.

Roles and Responsibilities **Interfaces**

Roles and Responsibilities	Interfaces
Mission: • Implement ER Program • Maintain the ER program (strategic planning) • Perform any additional characterization • Develop and recommend remediation alternatives • Develop decision documents • Design and implement approved remedial actions • Provide appropriate records to the Administrative Records	• 371, 707, 771, 776, Material Stewardship Project (MSP), RISS Industrial—Provide information for UBC characterization planning and remediation sequencing, make area available for characterization • Environmental, Safety, Health & Quality (ESH&Q)—Environmental regulatory and policy guidance, transmittal of decision documents, analytical services, monitoring results • RISS-ESH&Q—Subject Matter Expert (SME) • RISS-Strategic Planning—Project planning and controls • RISS-Admin • KH Admin—Administrative Record

2.5.3 Subcontracting Strategy

The ER Program is organized with Kaiser-Hill conducting the strategic planning, program direction, and subcontracting. The core technical functions of the ER Program will be performed by subcontractors who function in a staff augmentation role as directed by Kaiser-Hill. A core team of subcontracted professionals who are knowledgeable about the history and functions of RFETS and who have demonstrated expertise in successfully planning and implementing ER projects will be retained to assist Kaiser-Hill in maintaining and implementing the ER program. Characterization and remediation projects will be performed by subcontractors. The characterization and remediation contracts will include incentive fees based on safety, cost, compliance, and achieving technical objectives.

3. IDENTIFICATION OF PROJECT RISKS

3.1 Safety

The primary safety risks associated with this project are identified in the Historical Release Report (HRR) and the Site Safety Analysis Report (SAR).

3.1.1 ER Programs

The principle hazards in the ER Program are low-level radiological and chemical contamination as well as standard industrial hazards. Most of these hazards will exist throughout the project and are related to actual characterization and remediation activities. These hazards will be analyzed as part of the IWCP process.

3.2 Environmental

ER projects are characterized and remediated under RFCA, which provides the regulatory framework for response obligations under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and corrective action obligations under RCRA. All projects will be evaluated for the potential to release emissions or generate waste. Where there is a potential for air emissions, the required permits are obtained, controls are put in place and monitoring equipment is used. When waste is generated, consistent with CERCLA, waste is characterized, containerized, and stored at the point of generation until on-Site storage or disposal is available. Storage at the point of generation conforms to the substantive requirements of RCRA. Planned and existing IWCPs include controls for worker safety and potential hazardous and radionuclide environmental impacts as required. The Environmental Checklist is used by the project team during project planning to evaluate the potential to impact surface water, air emissions, wetlands, endangered species, and historical sites. After completion, the checklist is forwarded to the compliance group. Issues that may have an impact are further evaluated and controls for mitigation are implemented through the IWCP.

3.2.1 ER Programs

Risk increases slightly during the characterization and remediation portions of this project. The increased risk to the public health and the environment is primarily from the disturbance of areas that contain contaminated media.

3.3 Safeguards and Security

This project does not manage special nuclear material and therefore follows the Site's general safeguards and security requirements. The ER program has minimal interfaces with Safeguards and Security. The primary interface is obtaining access to areas within the PA for characterization. The site infrastructure has adequate controls to prevent unauthorized access and the Safeguards and Security risk associated with this project is minimal.

3.4 Quality Assurance

Quality requirements shall be delineated in procurement and subcontract documents. All contracts will be reviewed for QA requirements to ensure that adequate quality controls are established and implemented by the subcontractor. The Kaiser-Hill *Procurement System (Volume 1)* document establishes procurement policies for the acquisition of supplies and services for RFETS. All Site personnel are required to utilize the *Acquisition Procedure for Requisitioning Commodities and Services* (1-W36-APR-111) when requisitioning commodities and services (including construction). Standing Order No. 63 establishes the requirements for preparing, reviewing, approving, issuing and controlling procurement specification for PL1 and PL2 commodities/items that are not stocked in the warehouse and are not covered by DES-210 or MAN-71-IWCP.

The *Occupational Safety & Industrial Hygiene Program Manual, Chapter 7* (MAN-072-OS&IH PM) establishes the requirements for Job Hazard Analysis (JHA) to identify hazards and control measures when planning and performing work in accordance with the requirements of the Integrated Work Control Package (IWCP) and the Integrated Safety Management System (ISMS). The JHA is a documented process whereby the steps to a job are analyzed for hazards and control measures prior to the job being done. Synonyms for a JHA include Activity Hazard Analysis (AHA), Job Safety Analysis (JSA) and Task Hazard Analysis (THA).

The DQO process (EPA, 1994; QA/G-4) has been adopted for all data collection activities for this project. Both the EPA and the DOE Office of Environmental Management have established the DQO process as policy (EPA, 1997; QA/R-5) for determining the types, quality, and quantity of data needed for environmental and waste management decision-making, while optimizing time and cost considerations. Currently analytical data that are collected in support of the ER Program are evaluated using the guidance developed in RF/RMRS-98-200, *Evaluation of Data for Usability in Final Reports.* This procedure establishes the guidelines for evaluating analytical data with respect to the Precision, Accuracy, Representativeness, Completeness and Comparability (PARCC) Parameters.

The *Transportation Manual* (1-T91-TRAFFIC-100) applies to all aspects of the identification, handling, packaging, shipping/transfer, storage incident to transfer, and transportation of material to, from and within RFETS. Nonradioactive and radioactive waste packaging requirements are established in *Nonradioactive Waste Packaging* (10C88-WP1027-NONRAD [currently under revision]) and *Solid Radioactive Waste Packaging Procedure* (4-D99-WO-1100).

The *Site Documents Requirements Manual* (MAN-001-SDRM) provides the methodology and requirements for controlling and developing Site documents. Records generated by the K-H Team are controlled in accordance with procedure 1-V41-RM-001, *Records Management Guidance for Records Sources.* The procedure establishes the requirements and responsibilities of Site records sources for the identification, generation, correction, authentication, protection, and turnover of records, regardless of media type, to the Site Records Management organization. Correspondence is controlled in accordance with procedure 1-11000-ADM-003, *Correspondence Control Program.* Manuals and procedures are distributed and controlled in accordance with procedure MAN-063-DC, *Document Control Program.*

Quality improvement is realized through use of a systematic means of identifying, tracking and correcting problems (deficiencies, non-conformances, issues etc.).The Site corrective action process is defined in the *Site Corrective Action*

Requirements Manual (SCARM). The SCARM establishes the process and responsibilities for identification, documentation, characterization, categorization and significance screening of deficiencies, management directives, and Site improvements. Any project personnel may identify problems at any time, through formal documentation of issues as stated in 3-X31-CAP-001, *Corrective Action Process* and 1-65-ADM-15.01, *Control of Nonconforming Items.* Management and independent assessments and surveillances are used to identify, track, and correct issues. The extent of causal analysis and corrective action(s) are commensurate with the significance of the failure or problem. Lessons Learned are communicated to staff by management where appropriate.

3.4.1 ER Programs

The primary quality risks associated with the ER program are properly conducting hazard analysis, characterizing data, packaging wastes, and managing records, especially the Administrative Record.

3.5 Scope, Budget, and Schedule

Following are the principal activities within the project that pose a high degree of scope, schedule or budget uncertainty.

Risk Area	Impact	Probability of Occurrence	Mitigation Measures
Radiological Soil Action Levels (SALs) lower than planned	Cost increase due to large excavation and waste volumes	Medium	As permitted under the contract, request change order due to increased waste volumes.
UBC greater than assumed	Cost increase due to large excavation and waste volumes	Medium	As permitted under the contract, request change order due to increased waste volumes.
Construction safety incident	Worker injured; work slow down; may receive penalties and fines	Medium	Increased emphasis on safety including safety penalties and bonus provisions in subcontracts.
Surface water standard not met	May receive penalties and fines; may need to additional remediation	Medium	Dam at Indiana is in baseline and will be constructed if required.

3.5.1 ER Programs

The areas of highest risk include the extent of under building contamination and contamination requiring remediation for the OPWL, the issue that the Original Landfill may be required to be removed rather than capped in place, and that the cleanup levels required to ensure protection of surface water have not been defined.

4. CONTROLS

Many controls/requirements used to manage this project are included in the Contract SOW, Exhibit A. The requirements specific to this project are discussed below.

4.1 Project Documents

Following are the primary documents for the ER Program:

- Site SAR
- RFCA
- RCRA Permit
- IA Characterization and Remediation Strategy
- ER Program Project Management Plan
- Integrated Monitoring Plan
- IA Sampling and Analysis Plan
- IA RSOP which will describe the remedial actions for the remaining IA actions.

- Additional sampling plans and Proposed Action Memorandum as required for IHSSs, UBCs and/or PACs that are not covered by the RSOP.
- Closeout Reports for the appropriate remedial actions.
- Interim Proposed Plan and CAD/ROD that will define land use and cleanup levels.
- Administrative Record for the appropriate areas and actions.

4.2 Safety

The primary mechanism for assuring safety in the execution of project work is the Site work planning process, IWCP. All work on Site is required to be planned in accordance with this manual. The IWCP incorporates Integrated Safety Management into the planning process, with particular emphasis on hazard identification. The Job Hazard Analysis (JHA) tool contained in the IWCP manual provides a comprehensive hazard identification process which involves the floor-level workers as well as safety discipline subject matter experts early in the planning phase. This provides an efficient and effective work plan that greatly minimizes the chances of encountering unexpected hazards.

The IWCP incorporates elements from each of the Site Safety Management Programs. The Safety Management Programs, which are largely managed within the ESH&Q organization, follow a requirement flow-down strategy that assures contractual requirements are met at the floor. Safety Management Program manuals have been developed for each program that establish Site requirements based on DOE directives and other regulatory drivers. These top-level documents establish the safety infrastructure governing the development of implementing procedures and work plans within the project. Safety Management Program resources have been assigned directly to the Project. These personnel are responsible for incorporating the SMP program requirements in work execution documents. The IWCP JHA determines involvement of appropriate SMP resources in the planning phase.

4.2.1 ER Programs

The controls and authorization basis for this program include the existing Site Infrastructure Programs and the Site SAR. This authorization basis will either be revised (if necessary) or replaced with a new authorization basis document to account for each of the building activity phases (major hazard reduction, equipment dismantlement, building decontamination, utility shutdown, and building demolition) leading up to site remediation. This will be done using the guidance and requirements in RFCA, which includes the development of a project-specific Health and Safety Plan. Remediation will be performed in accordance with the Site Remediation Plan using the authorization basis for the IHSS or OU that contains the building footprint as the only thing left of the building after demolition.

4.3 Environmental Stewardship

Environmental stewardship is embodied in the several areas:

- Environmental compliance
- Environmental monitoring
- Ecology and natural resource protection
- Natural resource conservation
- Recycling and waste reduction
- Soil, water, and building remediation

The environmental stewardship activities that will be conducted as part of the Remediation, Industrial and Site Services Project include:

- Conduct all activities in compliance with environmental regulations.
- Reduce worker/environmental risks by conducting stabilization/hazard removal, decommissioning, and remediation of high risk IHSSs as soon as possible.
- Minimize waste.
- Establish environmental stewardship goals for the project, including employee performance.

For project-specific compliance, an environmental plan will be developed that includes the following descriptions:

- Compliance activities such as inspections that are budgeted and scheduled
- Environmental Management Systems (EMSs) project-specific requirements. Specifically, the approach to environmental assessments, responsibilities, and project environmental stewardship reporting and metrics will be described.
- Type of work that is or will be conducted under the IWCP process. Under the IWCP process, work activities will be evaluated to determine their environmental impact. For example, the IWCP process identifies what risks/hazards need to be controlled during the excavation of an IHSS. Another example is identifying emissions or other waste streams that an activity may generate.

The following activities must be completed to reduce worker/environmental risks:

- Identify high maintenance/cost low value RCRA units within the geographical confines of this project. Close or make RCRA stable.
- Develop necessary regulatory documents (RSOPs) with the D&D program and ESH&Q to allow stabilization/hazard removal and decommissioning to be initiated in the industrial areas as soon as possible.
- Develop regulatory documents such as RSOPs, conditional CAD/ROD, etc. for environmental remediation with ESH&Q.
- Provide technical support to ESH&Q for the Actinide Migration evaluation, RSALs, land use, Natural Resource Damage Assessments, water quality issues, site-wide performance assessment, etc.

Waste minimization requires close coordination with the MSP. Material Stewardship waste minimization/optimization processes such as bar coding waste will be implemented, as appropriate.

4.3.1 ER Programs

The contract specifically references the following environmental stewardship requirements for Environmental Remediation projects:

- Plan, characterize, and remediate in accordance with RFCA.
- Develop draft interim CAD/ROD in accordance with RFCA.
- Maintain an Administrative Record in accordance with 40CFR 300-311.
- Comply with closure and post closure care requirements under the RCRA in accordance with RCRA, 40 CFR Parts 264 and 265.
- Package waste in accordance with appropriate waste acceptance criteria.

4.4 Safeguards and Security

The ER Program does not generally require access to classified information, and does not handle, store or disposition special nuclear material. It is assumed that there is a slight potential that classified material may be discovered during some of the remedial actions. If this occurs, the material will be secured and the appropriate personnel will be notified for appropriate dispositioning of the material.

4.4.1 ER Programs

Personnel and subcontractors requiring access to the protected area for characterization must possess an L or Q clearance or be escorted. The need for Q clearances may remain in some instances after protected area closure for appropriate access to classified historical records that may be relevant in determining details regarding previous operations and potential release of contaminants.

4.5 Quality Assurance

The Site Quality Assurance Program Manual has been developed to meet the requirements of 10CFR820.130. The Quality Assurance program at the Site level is managed by the ESH&Q organization. This organization maintains the program requirements, and performs those assessments and audits of the Project that require independence of the line organization. All assessments not requiring strict line independence are performed within the Project.

Quality Assurance resources have been supplied to the Project. These individuals are responsible for implementing Site quality assurance requirements in work execution documents.

4.5.1 ER Programs

The ER Program management will ensure that staff and subcontractors are adequately trained in hazard analysis and packaging procedures and in maintaining the Administrative Record. Periodic assessments will be conducted by the RISS ESH&Q organization. Additionally, the site ESH&Q organization will conduct periodic audits to ensure compliance with procedures. These audits will include the laboratories used for sample analysis.

4.6 Scope, Budget, and Schedule

Section H.1 of the Rocky Flats Closure Contract between the DOE and K-H states that "...the Contractor shall establish, maintain and use a project control system meeting the requirements specified in the contract...." The overall intent of the Project Control System (PCS) is to support the definition of work scope, assist with organizing project data, and use processes best suited to the RFCPs needs, environment, and K-H's management philosophy.

As part of its support function in the project organization of the RFCP, the Strategic Planning and Integration (SP&I) organization is responsible for issuing project control standards and instructions for use by the Project organizations and for maintaining the systems required for planning and project management. The standards maintained include those for organizing, planning, scheduling, estimating, authorizing, monitoring and changing work on the RFCP. Each standard is further defined through an integrated set of process or task-oriented instructions, responsibility assignment authority designations, and record management instructions. Additional detail can be found in the Project Control System Description (PCSD) on the site Intranet on the SP&I web page. The PCS maintained by SP&I include:

- Basis of Estimate Software Tool (BEST)
- Primavera Project Planner (P3)©
- P&I Reporting System
- PMP/PBD Database
- Baseline Change Proposal Tracking System
- Milestone Tracking System
- Project Management Reporting System
- Resource Management and Allocation System

These documents and systems provide the project planning and management tools required by the Projects to implement the Closure Project.

4.6.1 Earned Value

Earned value will be taken for all in-progress and completed activities in accordance with SP&I guidance. In general, earned value will be quantitative, where feasible. Earned

value taken for fee considerations is detailed in the Earned Value Activity Lists, which is an appendix to the Site-wide PMP.

4.6.2 Subcontractor Invoice and Claim Management

Following the reorganization of the RFCP around six main projects, the subcontract management and administrative functions were also reorganized. The formerly centralized procurement organization has been decentralized to give each of the Projects control of their subcontracting functions, with the Planning and Administration Organization serving in a support function to the projects.

Specifically, each of the projects has a Subcontract Administrator Lead and necessary professional and support staff, working directly for the Planning and Administration Manager in managing and administering all subcontract work for the project. The Planning and Administration Organization supports the projects by administering the Master Task Agreements that all of the projects utilize. The Planning and Administration Organization also manages subcontract close out and provides the small business liaison.

The Procurement Systems Organization within the MSP provides matrixed Procurement Leads to each of the projects for the procurement of commodities. This organization also provides procurement engineering and quality assurance and material logistics management to the projects.

Management of subcontracts, including subcontractor invoicing and claims management, will continue to follow the guidance as described in the Acquisition Procedure for Requisitioning Commodities and Services.

4.6.3 Change Management

The change control process governs the documentation and approval of changes to the Closure Project Baseline, ensuring the validity of the project technical scope, schedule, estimated cost, and allocation of funding is maintained. Change control actions may result in modifications to the contract between DOE and K-H, as such documentation and actions are subject to rigorous oversight (additional detail on change management can be found in the Project Control System Description).

Under the RFCP Contract there are two subprojects: (1) the contract baseline – developed and submitted to the DOE for baseline approval; and (2) the working target – used to manage the Closure Project's day-to-day activities. DOE has authorized K-H to complete the full scope of work in the Closure Project Contract. This authorization allows K-H to complete the full scope of work in the Closure Project Contract. This authorization allows K-H to accelerate or defer work without having to seek DOE approval for changes in the working target.

The Project Manager has authority to make changes within the project up to certain thresholds (Type III changes). Generally speaking, these changes include: funding transfers between CAs within the project; adjustments to schedule duration and logic ties that don't affect the project end date; and, minor editorial changes to scope documents. Additionally, the Project Manager has certain responsibilities for change control. The Project Manager:

- Authorizes actions necessary to sustain operations in a manner consistent with applicable environmental, safety, and health statutes, regulations, and procedure, regardless of established SCCB or ICCB change control approval thresholds.
- When such corrective actions are necessary, notifies the K-H Contracting Officer who in turn notifies the DOE Contracting Officer in writing within 24 hours of any action taken pursuant to this provision.
- Forwards a copy of this notification to the K-H Change Control Manager.
- Manages the contingency account for the project.
- Requests formal written direction from the DOE Contracting Officer prior to performing requested work if the DOE-directed changes are received in an informal manner (e.g., e-mail, voice mail, verbal, informal notes).
- Reviews correspondence from K-H Correspondence Control, project initiated correspondence, external correspondence from the regulators, changes to Standards, Directives or regulations and determines if contract modification is necessary.
- Prepares a draft Notice of Pending Change letter if responses are not received from the DOE within the requested timeframe or if DOE responses may result in a change to the Contract Baseline. Forwards the letter to K-H Contracts Administration (copy K-H Change Control Manager) for submittal to the DOE Contracting Officer.
- Monitors GFS/I requests and deliveries to determine if an excusable delay or other contract modification is necessary.
- Prepares draft Notice of Pending Change letter when an excusable delay or other contract modification is warranted, and provides letter to K-H Contracts Administration (copy K-H Change Control Manager) within three (3) days of first knowledge of impact (e.g., K-H Correspondence Control receipt date).
- Prepares and submits initial REA/Type I baseline change proposal (BCP) for changes to the Contract Baseline, documenting the scope, schedule, and cost impact of the change. Forwards the REA/CP to the K-H Change Control Manager after the Notice of Pending Change is submitted to DOE.
- Ensures necessary reviews and approval signatures (including K-H Contracts are completed in a timely manner, enabling CPs processing to be completed according to the designated reporting cycle schedule.
- Uses the Integrated Change Control Checklist to review all potential life-cycle scope, schedule, and cost impacts to the Contract Baseline, are completely and accurately documented.

- Compares internally generated changes against the change control thresholds (audit finding, planning changes) and, if warranted, prepares appropriate change documentation to update the K-H Working Target or Contract Baseline.
- Ensures the Project Management Plan is appropriately updated according to established configuration control procedures.
- Maintains the record file for all Type III changes.
- Notifies Cost Account Managers (including those of other impacted projects) regarding the disposition of submitted CPs.

5. WORK ACTIVITIES

5.1 Technical Strategy

5.1.1 ER Programs

Remediation of contaminated areas at the site entails removal of contaminated media above Tier 1 levels. The remediation of IHSSs will be conducted by excavating the contaminated media. Soils that are contaminated with radionuclides above the negotiated Tier 1 levels will be containerized and shipped for disposal. Soils below Tier 2 levels will be placed back into their respective excavations. Soils with contamination above Tier 2 but below Tier 1 levels will be evaluated for potential impacts to surface water to determine if a removal is necessary, or if the material can be returned to the excavation. The operation and monitoring of the RFETS pond system will continue until D&D and capping activities are complete in the event of a potential release.

The progress of both commercial and DOE supported technology development activities that have the potential to reduce site costs or risk will be monitored. Once applicable technologies have been demonstrated, their inclusion will be encouraged in commercial implementation of the cleanup. Examples of specific technology development activities that could support ER include: reactive barrier treatment of groundwater, improved UV/oxidation systems, improved DNAPL recovery systems and buried waste drum retrieval. Other technology development activities that could benefit the closure cap project are the Advanced Closure Project at Sandia National Laboratory and the capping study being performed at the Rocky Mountain Arsenal. These projects are addressing the arid climate; evapo-transpiration vegetative cover type designs and may well reveal improvements to the current design. Currently technology deployment activities within RFETS ER program include application of passive groundwater treatment using reactive metal barrier treatment and UBC characterization using horizontal direction drilling with environmental monitoring while drilling.

The strategy for the groundwater plumes will be to use passive treatment systems to contain or treat the contaminant plumes before the plumes daylight to surface water.

Reactive barriers will be the first choice for treatment technology for VOC plumes. This strategy was developed as a result of the Mound Site plume collection and treatment system demonstration project for the reactive barrier technology which was a team effort with EM-50 and EPA's SITE program. Zero valent iron is used as the reactive medium for the treatment system. A french drain system was constructed to collect the plume water and channel it to a passive treatment system. The treated water is directly released to the environment.

Remediation of IHSSs, PACs, UBCs, Plumes and OUs will be done in accordance with RFCA, consistent with the ER Ranking and area accessibility. Remediation will support the RFCA Vision statement and the Site's closure goals. The closure strategy identified through RFCA requires closure reduce risk to human health and the environment, be ultimately protective of surface water, and reduce landlord costs. The general rule is that one year is required for the planning and characterization process (planning documents, agency review and approval, sampling, data analysis) and one year is required for remediation (subcontractor procurement, mobilization/demobilization, field implementation, confirmatory sampling, data analysis, closeout reporting). Because the 2006 closure strategy significantly compresses the schedule, IHSSs, PACs and UBCs are grouped as practical to gain efficiency in cost and schedule. Grouping allows cost and schedule savings during preparation and review of planning documents, remediation, contracting and data management.

For the Present Landfill, Original Landfill, and Solar Evaporation Ponds area, a cover will be installed as a final remedy following removal of hot spot contamination. The cover will meet the requirements for protection of surface waters and will be designed as an evapo-transpiration cover following the criteria in RFCA Attachment 10.

The strategy for the 903 Pad remediation cleanup levels will be determined based on information developed in the Actinide Migration Study and as agreed upon by the stakeholders. The strategy is to perform a Tier 1 source removal action along with additional actions such as modifying the South Interceptor Trench to ensure protection of surface water.

Wherever appropriate, planning for BZ remediation projects will address compliance with the Endangered Species Act via consultation with the US Fish and Wildlife Service. In addition, Natural Resource Damage Assessment issues will be considered and addressed through cooperative involvement of the Natural Resource Trustees in the design and execution of all projects that have the potential to impact the environment of the BZ or recovered IA during closure activities.

The general strategy to remediate or contain IA IHSSs, PACs and UBCs by initiating characterization during the last year of decommissioning for D&D-dependent IHSSs and PACs and begin remediation immediately following completion of facility demolition. For non-D&D related IHSSs and PACs, characterization and remediation will occur when

funds are available with the strategy of remediating sections of the Site at one time. Deep contamination such as under multi-story basement buildings and deeply buried process waste lines where there is no exposure pathway will not be remediated. Specific to the process waste lines, sanitary sewer lines and storm drains, the strategy is to remediate areas of the lines and drains that trigger Tier 1 action requirements, then abandon the rest in place. Foaming or grouting will be done to eliminate void space that could act as a conduit for water after site closure and to prevent pipe collapse that would create subsidence.

After remedial actions are complete, building foundations, utilities, other remaining structures, paved roads and/or parking lots will be removed or covered by a minimum of three feet of fill after final grade. The east and west access roads and north perimeter road will be left to allow access to monitoring locations. The site will then be recontoured and revegetated to obtain a final land surface configuration that will be protective of human health and the environment and will meet surface water protection standards consistent with future land use.

5.2 Material Management

The ER Program is responsible for ensuring that waste generated from ER remediation activities complies with applicable legal and Site requirements for waste handling, packaging and disposal. This includes estimating assumed waste volumes, application of waste reduction, recycling and process optimization strategies, and interfacing with Material Stewardship to ensure safe, compliant and cost-effective waste disposition.

5.2.1 ER Programs

Wastes generated from ER activities derive from groundwater treatment and from soil remediation. Passive reactor barrier systems use reactive media (iron filings and wood chips) to remove or stabilize hazardous and radiological contaminants in groundwater. Every 5 to 10 years, contaminated reactive media in the reactor cell is replaced and disposed of as low level or low level mixed waste. Waste generated from soil remediation contains soil and associated debris (pipe, concrete, buried drums, wood) contaminated with hazardous and/or radiological contaminants.

Because of the variable nature of ER remediation wastes among and between release sites, the Waste Management Plan is specific to the project and included as a section of the decision document. The plan describes, as applicable, estimated volumes of anticipated waste types, waste segregation and packaging, drill cuttings and laboratory sample disposition, personal protective equipment (PPE) requirements and disposition, waste reduction/sizing/recycling, and equipment decontamination. Waste reduction processes focus on minimizing the amount of uncontaminated material excavated and on technologies such as thermal desorption to remove organic contaminants. The nature of ER wastes (soil, buried debris) minimizes opportunities for recycling.

Estimates of anticipated waste volumes from ER projects are based largely on historical records of contaminant releases, and supported by sampling data where available. Volumes are estimated for all known release sites where remediation is assumed. Overall, confidence in the estimates is moderate to high for sites in the BZ that were previously investigated as part of Interim Actions/Interim Remedial Actions and/or Remedial Facility Investigations/Remedial Investigations, and low to moderate in the IA. Little characterization has been performed in the IA to support waste volume estimates.

Waste generated by ER projects will be closely tracked by waste volume generated, waste type, and waste container. An ER tracking system will be utilized to compare waste generated by each project to the estimated waste volumes as above, and to the contract waste volumes.

Interface with Material Stewardship spans life cycle planning to final waste disposition. Waste estimates generated for all ER projects required for Site closure are provided to Material Stewardship. These estimates are provided by remediation schedule and categorized according to waste type and container requirements. As schedules change or new release site information becomes available, Material Stewardship is provided with updated estimates. Prior to project start-up, waste management plans are reviewed with Material Stewardship to ensure safe, compliant and cost-effective waste management activity. During project execution, the ER will interface closely with Material Stewardship to ensure effective implementation of planning elements.

6. PERFORMANCE FEEDBACK

The performance measures for subcontractors and the entire project are listed below:

- Safety Performance – number of first aid injuries, recordable injuries and lost work days will be documented and compared against required standards to determine if corrective measures are required to improve performance. Safety performance bonuses and penalties will be included in the subcontracts.
- Environmental Stewardship Performance – this indicator will be tracked and trended to determine if corrective measures are required to improve performance. All compliance issues will continue to be tracked and closure documented by using the Site ECATs system.
- Safeguards and Security Performance – Lost or forgotten badges and security violations will be tracked against site performance goals.
- Production Indices – Earned value will be documented for all applicable work scope and will be monitored to verify that production goals are met. The ER Action Tracking List (Appendix H) is the primary mechanism for tracking ER production.
- Cost, Schedule, and Milestone Performance – Cost and schedule performance will be monitored to verify that performance is within Site standards and that underlying

problems and issues are quickly identified and corrected. As above, the ER Action Tracking List (Appendix H) is the primary mechanism for ensuring that performance remains on track.

7. REFERENCE INFORMATION

7.1 Acronyms

BZ	Buffer Zone
CAD/ROD	Corrective Action Decision/Record of Decision
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (The 'Superfund' Law)
CV	Cost Variance
CRA	Comprehensive Risk Assessment
DOE	Department of Energy
DQO	Data Quality Objectives
EMS	
EPA	Environmental Protection Agency
ER	Environmental Remediation
ERA	Ecological Risk Assessment
ESH&Q	Environmental, Safety, Health & Quality
FY	Fiscal Year
HHRA	Human Health Risk Assessment
IA	Industrial Area
IHSS	Individual Hazardous Substance Site
ISM	Integrated Safety Management
IWCP	Integrated Work Control Program
K-H	Kaiser Hill
LLW	Low-level Waste
LRA	Lead Regulatory Agency
MSP	Material Stewardship Project
NFA	No further action
NPWL	New process waste lines
OPWL	Original Process Waste Lines
OU	Operable Unit
PAC	Potential Area of Concern
PCB	Polychlorinated Biphenyls
PMP	Project Management Plan
PPE	Personal Protective Equipment
Pu	Plutonium
PU&D	Property Utilization & Disposal
QA	Quality Assurance
QAP	Quality Assurance Plan

QAPP	Quality Assurance Program Plan
RCRA	Resource Conservation and Recovery Act
RFCA	Rocky Flats Cleanup Agreement
RFETS	Rocky Flats Environmental Technology Site
RFI/RI	RCRA Facility Investigation/Remedial Investigations
RFFO	Rocky Flats Field Office
RISS	Remediation, Industrial D&D, & Site Services
RSAL	Radiological Soil Action Levels
RSOP	RFCA Standard Operating Protocol
SAP	Sampling and Analysis Plan
Site	Rocky Flats Environmental Technology Site
SME	Subject Matter Expert
SNM	Special Nuclear Material
SOW	Statement of Work
SV	Schedule Variance
UBC	Under building contamination
WAC	Waste Acceptance Criteria
WBS	Work Breakdown Structure
WIPP	Waste Isolation Pilot Plant
WMP	Waste Management Plan

7.2 References

DOE, 1996, Rocky Flats Cleanup Agreement (RFCA)

Appendix A
Contract Statement of Work

APPENDIX A

DETAILED DESCRIPTION OF SCOPE AND SERVICES

I. Special Nuclear Material

The Contractor will be required to perform the work listed below for the removal of all Special Nuclear Material (SNM).

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	CORRESPONDING WBS ELEMENTS INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS [1]
A. Plutonium 1) Ship all non-classified plutonium metals and oxides to the Savannah River Site or other DOE approved alternative[2] by September 30, 2002 (except for Pu holdup discovered and/or removed after 9/30/02). 2) Ship all classified, by shape, plutonium metal to the Savannah River Site or DOE approved alternative by September 30, 2002. 3) Ship all plutonium fluorides to the Savannah River Site or DOE approved alternative by September 30, 2002. 4) Ship all plutonium metal composites to Lawrence Livermore National Laboratory or DOE approved alternative by September 30, 2002. 5) Ship all IAEA material to Savannah River Site or DOE approved alternative by September 30, 2002.			• Non classified plutonium metal and oxide must be packaged to the DOE-STD-3013-96 prior to shipment to the DOE approved receiver site. • All Special Nuclear Material must be shipped in a DOE approved shipping container (i.e. 9965, 9975, DT22, etc.) • DOE Orders 5610.12, 5610.14 and 460.1A must be followed.	• Safe, Secure Transport services (e.g., escorts, tractor and trailer) at a rate and number sufficient to support SNM shipments (average number of 5 shipments per month not to exceed 9 shipments per month) started on 10/01/99 and ending as early as 10/1/01 and no later than 9/30/02 for a total of 175 shipments. • DOE approved receiver sites that can receive SNM and plutonium fluorides and IAEA materials at a rate to support shipment completion as early as 10/1/01 and no later than 9/30/02 (average number of 5 shipments per month not to exceed 9 shipments per month). • DOE-provided containers for SNM at a rate and number consistent with the planning and approval process described in C.3 to support the SNM shipping schedule. (DOE to certify but not provide 9975 and 3013 containers) • Specific container list TBD

[1] As used throughout this Technical Exhibit A, "None" is used solely to indicate that the Government has not identified a specific service or item to be provided by the Government in support of the particular scope description.

[2] Dependent upon the completion of the NEPA process for the Record of Decision for Disposal.

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	CORRESPONDING WBS ELEMENTS INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
B. Highly Enriched Uranium Ship all highly enriched uranium metal that is contaminated with plutonium to the DOE approved receiver site by September 30, 2002. **C. Other Nuclear Materials** Ship all depleted uranium, 4.5% LEU, radioactive sources, thorium samples, U-233 non-combustibles to designated DOE or other approved receiver sites by September 30, 2002.			• All Special Nuclear Material must be shipped in a DOE approved shipping container (i.e. 9965, 9975, DT22, etc.) • DOE Orders 5610.12, 5610.14 and 460.1A must be followed.	• Same items as for Section A. Plutonium. • In addition for C, - NEPA as required - Designated receiver sites - Certified shipping containers • DOE-provided containers for SNM at a rate and number consistent with the planning and approval process described in C.3 to support the SNM shipping schedule. (DOE to certify but not provide 9975 and 3013 containers) • Specific container list TBD

II. Facility Deactivation, Decommissioning and Demolition

The Contractor will be required to deactivate, decommission and demolish the Rocky Flats facilities in accordance with the Rocky Flats Cleanup Agreement, except for those facilities specifically defined by DOE to remain as detailed below:

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
A. SNM Buildings The Contractor shall deactivate, decontaminate and demolish all former Special Nuclear Material building clusters & supporting facilities to include (See Project Baseline Descriptions, for cluster descriptions) • B371/374 cluster by March 1, 2006, • B771/774 cluster by October 1, 2004, • B707/750 cluster by February 1, 2005, • B776/777 cluster by March 1, 2004, and • B559 cluster by September 1, 2004.	AAC, AAD CAC, CAD BAC, BAD DAC, DAD		Planning, characterization, area preparations, physical decontamination, dismantlement, demolition and reporting requirements shall be accomplished in accordance with the Rocky Flats Cleanup Agreement.	• CERCLA Administrative Record Repository • DOE shall provide comments on draft decision documents and regulatory reports within 20 business days of receipt.
B. Other Facilities The Contractor shall decontaminate and demolish the remaining building clusters & supporting facilities by September 30, 2006. (See Project Baseline Descriptions for cluster and supporting facility descriptions.)	ECC, ECD, EDC, EDD, EEC, EED, waste storage bldgs		Planning, characterization, area preparations, physical decontamination, dismantlement, and demolition shall be accomplished in accordance with the Rocky Flats Cleanup Agreement.	• CERCLA Administrative Record Repository • DOE shall provide comments on draft decision documents and regulatory reports within 20 business days of receipt.

III. Waste Management

The Contractor shall store, process and/or package and ship to DOE approved or other storage, treatment or disposal sites all wastes. These wastes consist of transuranic (TRU) and transuranic mixed (TRU mixed), low level radioactive (LLW) and low level radioactive mixed (LLW mixed), hazardous, and sanitary waste. These wastes must be processed and/or packaged to meet disposal or receiver site criteria as stipulated below:

SCOPE	CORRESPONDING WBS ELEMENT		REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
	EXECUTION WBS	INTERFACE WBS		
A. Transuranic and Transuranic Mixed Waste Ship to the Waste Isolation Pilot Plant (WIPP) and other DOE designated sites, all transuranic and transuranic mixed waste by December 15, 2006.			• The Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC) Rev. 5, dated April 1996, and DOE Order 435.1. • The TRUPACT-II Authorized Methods for Payload Control (TRAMPAC) procedure and Site-Specific TRAMPAC for TRU waste loading requirements. • The TRUPACT-II SARP (Safety Analysis Report) and TRUCON (TRUPACT-II Content Code). • All DOT transportation requirements applicable at the time of shipment for hazardous and radioactive waste must be met as well. --10 CFR Parts 70 & 71 (packaging) --49 CFR Parts 107, 110, 171, 173 (transportation) --Packaging QA Program Plan	TRUPACT II containers and trailers to support transuranic and transuranic mixed waste (including classified waste) shipments to WIPP and other DOE approved storage, treatment or disposal sites. TRUPACT IIs were delivered to Rocky Flats Site beginning on 10/01/99, and will be delivered at the following rates per month: FY00 36/mo FY01 72/mo FY02 120/mo FY03 120/mo FY04 120/mo FY05 80/mo FY06 36/mo FY07 36/mo DOE will also provide all transportation services from the loading facilities at Rocky Flats to all DOE approved sites.

B. Low Level Waste Ship to approved DOE or commercial disposal sites all low-level waste by December 15, 2006. The Contractor shall provide transportation services to the disposal site and disposal site fees unless otherwise stipulated by DOE.			Disposal site waste acceptance criteria and DOE Order 435.1, All applicable DOT requirements at the time of shipment for radioactive waste must be met. Currently available disposal site – the DOE Nevada Test Site (NTS) in accordance with NTS Waste Acceptance Criteria dated August 1997, Rev 1, or Commercial Waste Acceptance Criteria if that disposal option is chosen.	DOE receiver sites that can accept waste at a rate and number consistent with the planning and approval process described in C.3. to support low level waste shipments.
C. Low Level Mixed Waste (less than 10 nanocuries per gram) Ship to approved DOE or commercial treatment and disposal sites all low level mixed waste less than 10 nanocuries per gram by December 15, 2006. The Contractor shall provide transportation services to the disposal site and treatment and disposal site fees unless otherwise stipulated by DOE.			Disposal site waste acceptance criteria and DOE Orders 5480.3 and 435.1. All applicable DOT requirements for shipment of radioactive and hazardous waste must be met.	DOE fulfills its commitment in the Waste Management Programmatic Environmental Impact Statement to designate DOE or commercial receiver site(s) that can accept waste at a rate and number consistent with the planning and approval process described in C.3 to support low level mixed waste shipments.
D. Low Level Mixed Waste (greater than 10 nanocuries per gram and less than 100 nanocuries per gram) Ship to approved DOE or commercial treatment and disposal sites all low-level mixed waste greater than 10 nanocuries per gram by December 15, 2006. The Contractor shall provide transportation services to the disposal site and treatment and disposal fees (up to the unit price in III.C. above) unless otherwise stipulated by DOE.			Disposal site waste acceptance criteria and DOE Orders 5480.3 and 435.1, All applicable DOT requirements for shipment of radioactive and hazardous waste must be met.	DOE fulfills its commitment in the Waste Management Programmatic Environmental Impact Statement to designate DOE or commercial receiver site(s) that can accept waste at a rate and number consistent with the planning and approval process described in C.3 to support low level mixed waste shipments.

E. Sanitary Waste Ship to commercial facilities for disposal, or recycle, all sanitary waste by December 15, 2006.			Local and state regulations regarding waste acceptance at sanitary landfills as well as any requirements associated with individual disposal sites. Sanitary waste leaving the Rocky Flats Site must be inspected to assure that no radioactive materials are present in accordance with Colorado Sanitary Waste regulations (6 CCR 1007-2) for landfills and individual landfill permits.	None
F. RCRA Regulated Hazardous Waste Ship to commercial facilities, all RCRA Regulated Hazardous Waste by December 15, 2006.			Disposal sites waste acceptance criteria, the Resource Conservation Recovery Act and DOE Order 435.1	None
G. Waste Minimization The Contractor shall develop and implement a pollution prevention program incorporating waste prevention, recycling and an affirmative procurement program. The Contractor shall establish waste reduction goals for transuranic, low-level waste, low level mixed and RCRA regulated hazardous waste.			• Executive Order 12856 • Executive Order 13101 • DOE Order 5400.1	None

IV. **Environmental Remediation**

The Contractor shall prepare a draft interim final record of decision (ROD), submit to DOE for DOE, EPA, and CDPHE approval, and complete all actions required by the approved interim final ROD to remediate soil, surface water, ground water, and other contaminated media. The remediation shall be completed as stipulated below:

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
A. Remediation The Contractor shall remediate Individual Hazardous Substance Sites (IHSS)[3], Potential Areas of Concern (PAC), or under building contamination (UBC) by December 15, 2006. The total waste volumes for this environmental remediation portion of the project are assumed not to exceed those quantities as follows: • Non-Rad Waste: 11,000 cubic yards • Low Level Waste: 107,000 cubic yards • Low Level Mixed Waste <1 nanocurie: 41,000 cubic yards • Low Level Mixed Waste >1 nanocurie: 220 cubic yards			• Planning, characterization, area preparations, remediation, disposition, final regulatory approvals and reporting requirements shall be accomplished in accordance with RFCA • Remediation shall be specified in the approved interim final Record of Decision (ROD) and Proposed Plan • Contractor must transport and maintain CERCLA administrative record IAW 40 CFR 300-311	• CERCLA Administrative Record Repository • DOE shall provide comments on draft decision documents and regulatory reports within 20 business days of receipt.

[3] If the 903 Pad Remediation Project removal option is exercised, then the project planning, execution and completion as identified in WBS #1.1.03.12.06.02 shall be removed from the scope of work and this contract.

B. Post Closure Care under RCRA Permit The Contractor shall perform the closure and post-closure care requirements for RCRA permitted and interim status units during the performance of this contract.			The Contractor shall comply with closure and post closure care requirements under the RCRA permit in accordance with RCRA, 40 CFR Parts 264 and 265, the Colorado Hazardous Waste Act requirements, 6 CCR 1007-3 and RFCA.[4]	None

C. End State
The Contractor shall develop and submit for RFFO and regulatory approval a Draft Interim Final ROD and Proposed Plan. The end state is defined in Clause C.1.2.
			• Draft Interim Final ROD shall be in accordance with RFCA and be of sufficient quality and completeness to obtain regulatory approval and issuance of an approved Interim Final ROD and Proposed Plan.
			• Draft Interim Final ROD will be prepared and presented in sufficient time to allow:
			  • Public and regulatory review as provided in RFCA
			  • Regulatory approval and publication
			  • Completion of remediation actions described in the ROD and Proposed Plan prior to December 15, 2006
			• Contractor must transport and maintain CERCLA administrative record in accordance with 40 CFR 300-311.
				• CERCLA Administrative Record Repository
				• DOE shall provide comments on draft decision documents and regulatory reports within 20 business days of receipt.
				• DOE will use its best efforts to obtain an approved Interim Final ROD.

[4] Assumes RCRA Permit is not extinguished and its requirements are not absorbed into RFCA.

V. Infrastructure and General Site Operations

The Contractor shall perform the infrastructure operations and general support services listed below in support of the site closure mission.

- All items listed below are required until the end of this contract unless otherwise approved for termination by DOE.
- These items are generally required to support the items listed Sections I through IV above, or the general operation of the site until closure
- It is recognized that this is a closure site, all facilities have a limited life span, and the nuclear safety risk and required controls should be steadily declining throughout the project. The standard requirements referenced in this contract are generally designed for continuous ongoing facility operations. this will create the desirability for a number of interpretations and/or exceptions and deviations from the standard requirements to ensure that project costs are being deployed for the maximum net government risk reduction. The Contractor and DOE shall actively engage in early identification and appropriate requirements reduction activities to ensure a safe and cost effective closure.
- The Contractor shall provide any other services or operations not listed below as required by other contract requirements including those DOE Orders listed in Section J, Attachment B.
- Safety services are subdivided into three sections: 1) Nuclear safety requirements which apply to handling and processing fissile material and to the operation of facilities that house fissile material, 2) radiological safety requirements that apply to handling and processing of radioactive waste and operations in facilities that are radiologically contaminated or house radioactive materials, and 3) industrial safety requirements which apply to all work activities and facilities at the Site.

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	CORRESPONDING WBS ELEMENTS INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
A. Environmental Monitoring The Contractor shall conduct required environmental monitoring in compliance with environmental laws, regulations, permits, agreements, decision documents and in support of emergency response activities. The Contractor shall provide annual updates to the Historical Release Report and CERCLA Administrative Record. The Contractor shall maintain the current and any new enforceable agreements at the Site as identified in the technical exhibit D in this section C.	H..	F.. (for information to better plan characterization and remediation), AAB, BAB, CAB, DAB, ECB, EDB, EEB, waste storage bldgs (for access to monitoring locations)	Environmental Monitoring shall be accomplished in accordance with the provisions of Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Clean Air Act; the Clean Water Act; the Colorado Water Quality Control Commission (CWQCC) standards; natural resource management regulations, and RFCA. [5]	DOE will provide necessary access to accomplish all offsite environmental monitoring.
B. Facility Operation and Material Storage The Contractor shall operate all facilities until they are demolished in accordance with applicable	AAB, BAB, CAB, DAB, ECB, EDB, EEB, waste storage		Applicable requirements for facility operation or material storage are listed in Section J, Attachment B..	None

[5] Requirements will be revised if RFCA is amended to include above stated requirements as ARARs.

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
safety, security requirements and store all materials (chemicals, etc.), waste, property, etc., in accordance with applicable requirements.	bldgs			
C. Safeguards & Security The Contractor shall ensure appropriate levels of protection against unauthorized access; theft, diversion, loss of custody of Special Nuclear Material; espionage; loss or theft of classified matter or Government property; and other hostile acts that may cause unacceptable adverse impacts on national security or the health and safety of DOE and contractor employees, the public or the environment. The Contractor shall promptly prepare and submit applications for security clearances as required for work under this contract. The Contractor shall deter, prevent, detect and respond to unauthorized possession, use, or sabotage of Special Nuclear Materials. The Contractor shall provide an integrated system of activities, systems, programs, facilities and policies for the protection of classified information, nuclear materials, and DOE and certain DOE contractor property and personnel as required by the Atomic Energy Act of 1954, as amended, other Federal statutes, Executive orders, and other directives.			• Program Management, DOE Order 470 Series • Personnel Security, DOE Order 472 Series • Protection Operations, DOE Order 5632 and DOE Order 473 Series • Materials Control And Accountability, DOE Order 5633 and DOE Order 474 Series • Information Security, DOE Order 5639 and DOE Order 471 Series	DOE shall promptly process Contractor security clearances. On average, processing time will be in accordance with DOE Order 472 guidelines which for clear cases will be at or below the following: Q clearance- 75 calendar days L clearance - 75 calendar days AAA clearance - 60 calendar days Processing time begins upon receipt of the case from the Contractor.
D. Analytical Services The Contractor shall perform and maintain			Analytical Services and laboratories shall be operated in accordance with	DOE shall maintain a quality National Analytical Management Program or a DOE alternative program

Analytical Services and/or Laboratories. The Contractor shall ensure that any lab samples analyzed by off-site laboratories will be disposed of from the laboratory and not returned to the Rocky Flats Site for disposal unless there is prior contractual agreement for the return of specific samples for which no other disposition is possible.			one or more of the following references: 10 CFR 830.120, DOE Order 414.1, ASME-NQA-1, ANSI/ASQC E4, and/or ISO 9000.	which supports the analytical services necessary to close the site.
E. Public Relations & Media Support The Contractor shall provide communication services to include Citizens Advisory Board representation, tours and visits and other stakeholder support.			• Communication services shall be provided as needed to maintain stakeholder support for the Rocky Flats Closure Project. • Contractor must transport and maintain supporting community documents in the established DOE Reading room(s).	DOE Reading Room(s)
F. Litigation Management The Contractor shall maintain a legal function and demonstrate sound litigation management practices to include litigation, arbitration, legal advice on environmental matters, procurement, employment, labor, and the Price-Anderson Act (PAA); review and interpretation of legislation and laws; research and drafting of memorandum, and the management and oversight of outside legal counsel; for both the prime and subcontractors. The Contractor shall provide litigation support to the Government when judged necessary by the Contracting Officer (or Contracting Officer Representative) in cases of actual or threatened litigation, regulatory matters, or third-party claims and subject to applicable rules and regulations. Litigation support includes, but is not limited to:			• Litigation management practices shall be provided in accordance with the RFFO approved Litigation Management Plan. • Department of Energy, Office of General Counsel, Legal Services and Litigation Management Policies and Procedures	None

case preparation assistance; document retrieval, review and reproduction; witness preparation and testimony; expert witness testimony; and assisting Government counsel as necessary in response to discovery or other information related activities responsive to any legal proceeding.				
G. Audit Support Services The Contractor shall provide audit support services for GAO, IG, DNFSB, EPA, CDPHE and other external audits that examine and evaluate Site-wide activities.			Audit Support Services shall be provided in accordance with DOE Order 2300.1B, Audit Resolution and Follow-up, DOE Order 2320.1C, Cooperation with the Office of Inspector General, DOE Order 2321.1B, Auditing of Programs and Operations; and, Department of Energy, Office of General Counsel, Legal Services and Litigation Management Policies and Procedures	DOE /OIG Rocky Flats Audit Plan

H. Utilities & Infrastructure The Contractor shall provide and maintain the infrastructure, utilities, etc. necessary to support the closure mission. DOE will provide at a later date a specific definition of which roads and components of the site utility system that will remain after closure.	EA..		Utilities and infrastructure shall be maintained in accordance with DOE Order 430.2 and the Site Safety Analysis Report.	DOE shall provide and pay for site utilities to include raw water, electricity, natural gas and heating oil.
I. Radiological Assistance Program The Contractor shall provide a field unit under the Radiological Assistance Program (RAP) until the RAP program is terminated by DOE.			DOE Order 5530.3 provides the requirements for the Radiological Assistance Program.	DOE shall provide additional funding for the RAP and one member and may provide up to three (3) members for the RAP team.
J. Health Effects The Contractor shall provide support for health programs/ambulatory care, beryllium and radiation worker health surveillance programs and personnel monitoring program. These services are required to assess, monitor, record data, and provide medical support for current site workers who are or may be exposed to radiological and hazardous materials. This is expected to encompass 6500 (+/-1000) current site workers through the term of this contract. The Contractor shall maintain medical records of former workers and make them available for health effects studies as requested by DOE.			Health effects shall be maintained in accordance with Public Law 102-484, DOE Order 440.1, and will last until the program and documents are turned over to DOE at the end of this contract.	None

K. Occupational Health The Contractor shall provide the following classes of examinations for the purpose of providing initial and continuing assessment of employee health: pre-placement in accordance with the Americans with Disabilities Act (42 United States Code 12101), qualification examinations, fitness for duty, medical surveillance and health monitoring, return to work health evaluations, and termination examinations. The occupational medical department shall be informed of all job transfers and shall determine whether a medical evaluation is necessary. The physician responsible for the delivery of medical services or his/her designee shall inform contractor management of appropriate employee work restrictions.			DOE Order 440.1A provides the requirements for employee health examinations. This applies to all contractor and sub-tier contractor personnel as required by DOE Order 440.1A.	None
L. Emergency Management The Contractor shall provide Site Emergency Management Services to include emergency planning and preparedness as well as response to possible incidents involving nuclear, radiological and hazardous materials on site. The Contractor shall provide a fully equipped and adequately staffed Emergency Operations Center on the site.	EA...		DOE Order 151.1 specifies the performance requirements, capabilities and response times for emergency management services. Emergency management shall be performed at the levels specified until the major nuclear facilities' hazards are removed or ameliorated, or the facilities are demolished. A reduced level of emergency services may be allowed once the major hazards on-site are removed and as they are approved by DOE. DOE Order 225.1A specifies the requirements for conducting accident investigations.	None

M. Nuclear Criticality Safety The Contractor shall maintain a Nuclear Criticality Safety Program which ensures that operations with fissionable materials which pose a criticality accident hazard shall be evaluated and documented to demonstrate that the operation will be subcritical under both normal and credible abnormal conditions. Fissionable material operations shall be conducted in such a manner that consequences to personal and property that result from a criticality accident will be mitigated. No single credible event or failure shall result in a criticality accident having unmitigated consequences.			DOE Order 420.1 provides the requirements and invokes the applicable ANSI/ANS 8 Standards. Sabotage and seismic events that are predicted to result in facility collapse are exempt from the requirement for double contingency. The Criticality Safety Program will be required in each facility until fissile materials inventories are reduced to less than that stipulated in ANSI/ANL8.	None
N. Nuclear Safety The Contractor shall develop and maintain the safety analysis and controls for nuclear facilities, operations, and activities. Readiness determinations for restart of activities and for start-up of new activities will be required to demonstrate readiness to safely start the activity.			DOE Orders 420.1, 425.1, 5480.21, 5480.22, and 5480.23 specify the requirements for nuclear safety.	DOE complies with the following authorization basis review schedule: A. Justification for Continued Operation – 4 calendar weeks B. Page Change- 4 calendar weeks C. New -Authorization Basis- 2 calendar months D. Authorization Basis revision- 6 calendar weeks E. Positive unreviewed safety question - 2 calendar weeks DOE will work cooperatively with the Contractor to improve upon this review schedule as a part of the best efforts approach of the Nuclear Licensing Statement of Commitment.

O. Occupational Safety The Contractor shall meet all occupational safety and health requirements (including but not limited to industrial safety, fire protection, construction safety, firearms safety, explosive safety, industrial hygiene, pressure safety and motor vehicle safety) for all site-related operations and conditions.			Occupational safety requirements are as stipulated in DOE Orders 420.1, DOE Order 440.1A.	None
P. Fire Protection The Contractor shall maintain an acceptable fire protection program which supports a level of fire protection and fire suppression capability sufficient to minimize losses from fire and related hazards consistent with the best in class of protected property in private industry.			DOE Order 420.1 provides the requirements and invokes the National Fire Protection Association Standards.	None
Q. Quality Assurance Program The Contractor shall perform all work on site in accordance with applicable quality assurance requirements.			DOE Order 414.1 and 10 CFR 830.120 specify basic requirements that apply to the quality assurance program. For site activities where transuranic waste will be characterized, packaged, or shipped, the DOE Carlsbad Area Office Quality Assurance Program Document, CAO-94-1012 and DOE Carlsbad Area Office Quality Assurance Program Plan, CAO-94-1010 shall apply. The Nevada Test Site Waste Acceptance Criteria shall apply for those activities where Low Level Waste is characterized, certified, packaged, or shipped.	None

S. International Agreements The Contractor shall support 12 inspections per year by the International Atomic Energy Agency (IAEA) as well as maintain material surveillance equipment.			• IAEA agreement INFCIRC 288 and DOE Order 1270.2B • This requirement will remain in effect until IAEA materials have been permanently removed from the Site.	None
S. Records Management and Document Control The Contractor shall provide on an ongoing basis the maintenance, storage, protection, and disposition of active and inactive classified and unclassified records, retrieval from on-site and off-site storage facilities and support in ongoing discovery efforts for litigation. All Government records, regardless of media, in the Contractor's custody must be properly inventoried, indexed, moved to DOE approved off-site storage facilities, and possess a disposition schedule or equivalent thereof pending a schedule being developed, including those records that are required to document closure activities. Those records that are radiologically, beryllium or otherwise contaminated shall be handled and dispositioned in accordance with site procedures including applicable free release levels. The Contractor will provide a complete records inventory list in a hardcopy and electronic format to the post closure records custodian identified by the DOE Contracting Officer.			Records management and document control will be conducted in accordance with DOE Order 200.1, 36 CFR Chapter 12, Subchapter B and the Joint Records Management Strategy for Site Closure.	DOE approved receiver site(s).

T. Radiation Protection Program The Contractor shall ensure that all site activities are conducted in compliance with a documented Radiation Protection Program to minimize occupational exposure to internal radiation, direct, external exposure to ionizing radiation as well as to minimize the spread of contamination. The As Low As Reasonably Achievable (ALARA) process will be applied to all site activities.			10 CFR 835 and the Departmental Implementing Guides shall apply.	None.
U. Environmental Permits The Contractor shall obtain, maintain, and comply with environmental permits as required and allowed by law.	H...	AA, BA, CA, etc.	Contractor's compliance with environmental permits shall be in accordance with the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Clean Air Act; the Clean Water Act; and the Rocky Flats Cleanup Agreement.[6]	None

[6] Requirements will be revised if RFCA is amended to include above stated requirements as ARARs.

VI. DOE Office Accommodations

The Contractor shall provide basic office accommodations for DOE personnel as specified below. A central DOE office will be needed as well as smaller office accommodations in a few critical facilities until they are decommissioned. During the final stages of closure it is expected that DOE will relocate its office off-site.

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
DOE Offices DOE will continue to occupy Building 460 until the facility is scheduled for demolition or until the Contractor provides alternate office space, whichever occurs first. This includes space for up to 250 DOE and support service personnel. Regardless of location, DOE will require that at least 150 of the individual offices must be located in one building until the end of FY04. Up to a maximum total of 10 office spaces (no more than three in each building) must be maintained in or within 150 feet of Buildings 371, 750, 771, and 707 until the Contractor closes the facilities. DOE will require additional space for approximately 10 regulators doing Site inspections. Lunch services must be provided within 500 feet of the single large DOE office on-site until 2005. The Contractor shall provide for movement of DOE furniture property and other materials if offices are moved from the satellite offices, or from B460. Adequate access for DOE personnel is required through closure.			DOE office accommodations will be provided in Building 460, or an alternative. Any central office location besides Building 460 requested to house the DOE offices must be approved by the Manager, RFFO.	None

VII. Tri-Party Agreement

The Contractor shall continue to implement the Three Party Transfer Agreements.

SCOPE	CORRESPONDING WBS ELEMENTS EXECUTION WBS	INTERFACE WBS	REQUIREMENT(S)	GOVERNMENT FURNISHED SERVICES & ITEMS
Tri-Party Agreement The Contractor shall ensure the continued support and assistance to Rockwell and EG&G as prescribed by the RFP Three Party Transfer Agreement dated June 30, 1995.	I...		RFETS Three Party Transfer Agreement with DOE, EG&G Rocky Flats, Inc., and Kaiser-Hill Company, L.L.C., June 30, 1995, and as incorporated by reference, the RFP Three Party Transfer Agreement with DOE, EG&G Rocky Flats, Inc., and Rockwell International Corporation, October 23, 1989.	None

Appendix B
Baseline Budget

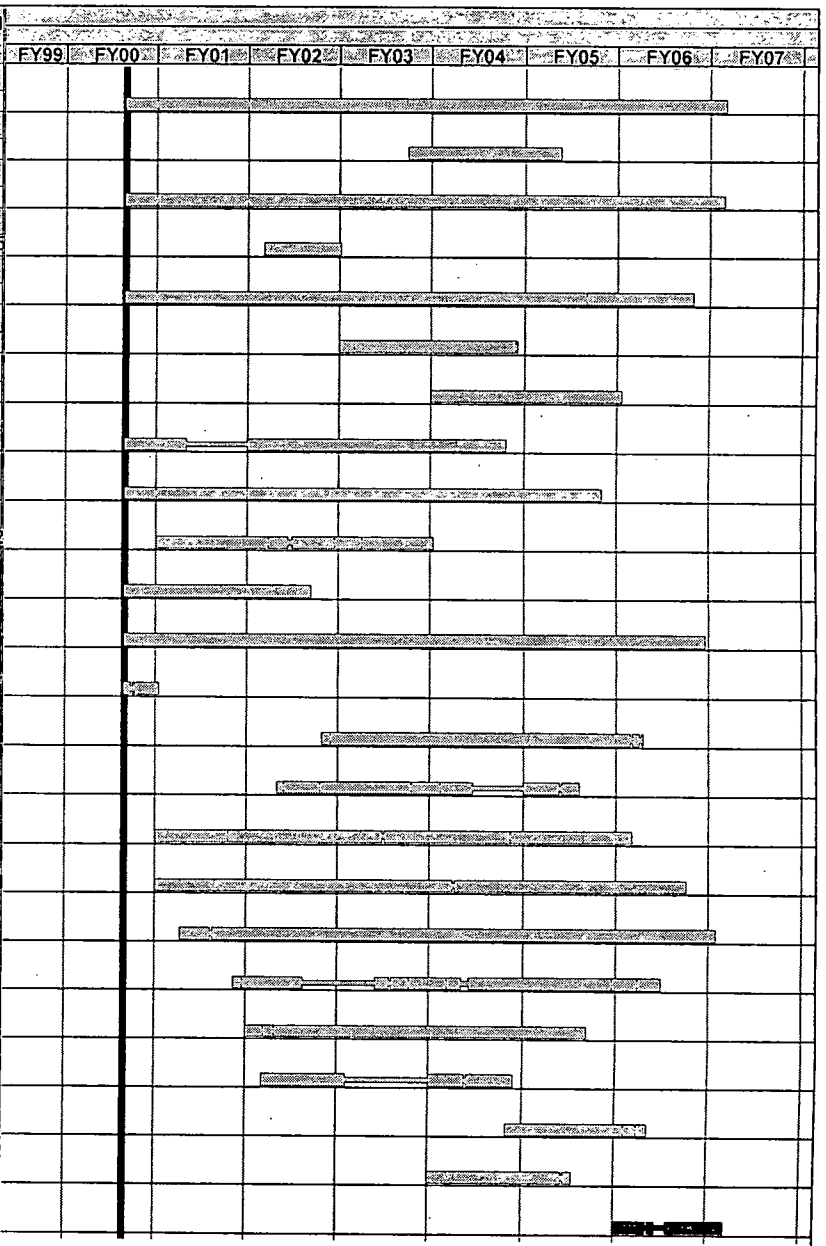
Project/Cost Account				FY00 Feb-Sep	FY01	FY02	FY03	FY04	FY05	FY06	FY07	Total
1G	Remediation Project											
	G	ER										
		1GAA	Project Management	326	947	972	1,079	929	1,281	1,531	306	7,372
		1GAB	Buffer Zone	1,233	1,509	2,618	12,298	29,818	21,530	755	293	70,054
		1GAC	Industrial Zone	1,942	4,725	13,007	35,728	33,483	80,926	38,288	5,696	213,795
			Project G Totals	**3,501**	**7,181**	**16,598**	**49,106**	**64,229**	**103,738**	**40,574**	**6,295**	**291,221**

Appendix C
Working Budget

Project/Cost Account				FY00 Feb-Sep	FY01	FY02	FY03	FY04	FY05	FY06	FY07	Total
1G	Remediation Project											
	G	ER										
		1GAA	**Project Management**	326	900	846	845	813	836	176	-	4,742
		1GAB	**Buffer Zone**	1,233	1,536	2,539	14,160	32,414	2,262	261	-	54,405
		1GAC	**Industrial Zone**	1,942	5,308	11,370	34,361	33,948	61,852	3,562	-	152,343
			Project G Totals	**3,501**	**7,743**	**14,755**	**49,367**	**67,175**	**64,950**	**3,999**	**-**	**211,490**

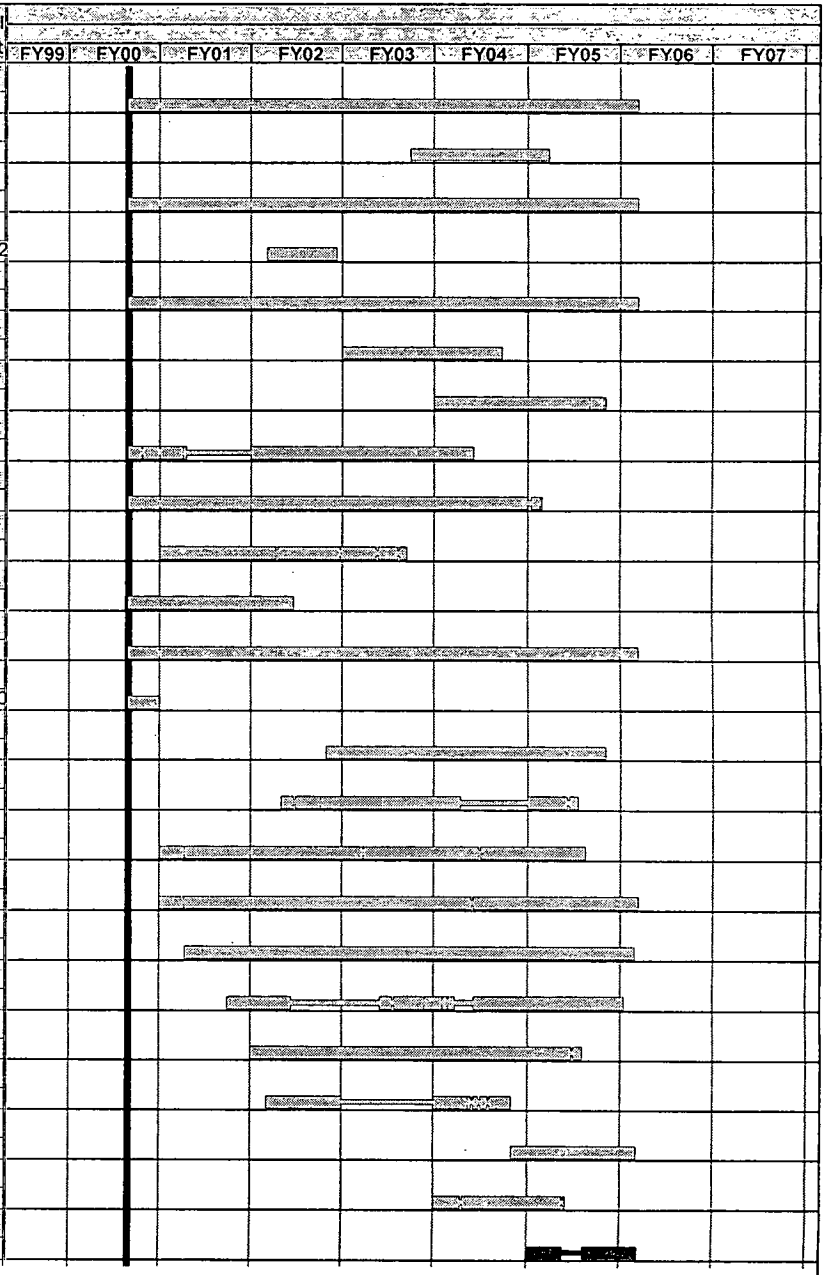
Appendix D
Baseline Schedule

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Free Float	Total Float
+ GA01	ER Project Management	1,488	22MAY00	04DEC06	0	8
+ GB01	Groundwater Plume (IA)	605	30JUN03	23FEB05	0	659
+ GB02	Plume Maintenance & Monitoring	1,485	22MAY00	28NOV06	0	11
+ GB03	Buffer Zone NFAs	309	03DEC01	07OCT02	0	1,465
+ GB04	Present Landfill	2,262	22MAY00	31JUL06	0	136
+ GB05	A-5 Dam	708	01OCT02	07SEP04	0	828
+ GB06	Buffer Zone Ponds Remediation	470	01OCT03	20OCT05	0	261
+ GB07	Misc Buffer Zone Remediations	1,521	22MAY00	20JUL04	0	877
+ GB08	903 Pad Remediation	1,899	22MAY00	02AUG05	0	499
+ GB09	CAD/ROD	1,103	02OCT00	09OCT03	0	1,162
+ GC01	IA Studies	467	22MAY00	10JUN02	0	884
+ GC02	IA SAP and RSOP	2,313	22MAY00	20SEP06	0	85
+ GC03	Misc. UBC Characterization	89	22MAY00	10OCT00	0	1,367
+ GC04	OPWL & NPWL	1,269	29JUL02	17JAN06	0	297
+ GC05	Sanitary Sewer	1,200	29JAN02	12MAY05	0	547
+ GC06	Solar Ponds Cap	1,894	02OCT00	08DEC05	0	371
+ GC07	Original Landfill Cap	1,315	02OCT00	10JUL06	0	99
+ GC08	IA D&D Dependent Remediation	2,123	09JAN01	01NOV06	0	43
+ GC09	IA D&D Dependent NFA	1,694	10AUG01	30MAR06	0	225
+ GC10	IA Non D&D Dependent Remediation	1,346	01OCT01	07JUN05	0	521
+ GC11	Non D&D Dependent NFA	1,003	03DEC01	31AUG04	0	801
+ GC12	Road and Asphalt Removal	346	02AUG04	07FEB06	0	195
+ GC13	Major Building Foudation Removal	569	01OCT03	21APR05	0	602
+ GC14	Regrade and Revegetate	274	03OCT05	14DEC06	0	0



Appendix E
Working Schedule

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Free Float	Total Float
+ GA01	ER Project Management	1,268	22MAY00	14DEC05	0	1
+ GB01	Groundwater Plume (IA)	548	30JUN03	28DEC04	0	352
+ GB02	Plume Maintenance & Monitoring	1,265	22MAY00	09DEC05	0	4
+ GB03	Buffer Zone NFAs	276	03DEC01	04SEP02	0	1,122
+ GB04	Present Landfill	2,028	22MAY00	09DEC05	0	6
+ GB05	A-5 Dam	632	01OCT02	23JUN04	0	540
+ GB06	Buffer Zone Ponds Remediation	422	01OCT03	05AUG05	0	82
+ GB07	Misc Buffer Zone Remediations	1,383	22MAY00	04MAR04	0	651
+ GB08	903 Pad Remediation	1,654	22MAY00	30NOV04	0	380
+ GB09	CAD/ROD	983	02OCT00	11JUN03	0	918
+ GC01	IA Studies	416	22MAY00	20MAR02	0	718
+ GC02	IA SAP and RSOP	2,028	22MAY00	09DEC05	0	6
+ GC03	Misc. UBC Characterization	82	22MAY00	28SEP00	0	1,140
+ GC04	OPWL & NPWL	1,107	29JUL02	08AUG05	0	85
+ GC05	Sanitary Sewer	1,177	29JAN02	19APR05	0	196
+ GC06	Solar Ponds Cap	1,690	02OCT00	18MAY05	0	211
+ GC07	Original Landfill Cap	1,186	02OCT00	14DEC05	0	1
+ GC08	IA D&D Dependent Remediation	1,787	09JAN01	30NOV05	0	15
+ GC09	IA D&D Dependent NFA	1,575	28JUN01	19OCT05	0	13
+ GC10	IA Non D&D Dependent Remediation	1,311	01OCT01	03MAY05	0	182
+ GC11	Non D&D Dependent NFA	968	03DEC01	27JUL04	0	462
+ GC12	Road and Asphalt Removal	308	02AUG04	07DEC05	0	6
+ GC13	Major Building Foudation Removal	517	01OCT03	28FEB05	0	290
+ GC14	Regrade and Revegetate	275	01OCT04	15DEC05	0	0



Appendix H
ER Action Tracking List

ER Site Action Tracking List

TYPE	Bldg	Area	Zone	ID	Description	IHSS Group	WBS	Rank	Proposed Action	RA Comp. Date	NFA FY Proposed Date	NFA Status	Reg. Accept. Date	Public Accept. Date	ROD Date	Comment
IHSS	207A	000	PZ	101	Solar Ponds	000-1	1.G.A.C.0A.01	14	Remedial Action							CAP Final Cover - Some RAD hot spots exist / HHRA 10 -4 ti -6, groundwater from 118.1 not used in ranking
IHSS	N/A	800	BZ	102	Oil Sludge Pit		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	N/A	800	BZ	103	Chemical Burial		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	N/A	800	BZ	104	Liquid Dumping		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	881	800	BZ	105.1	West Out-of-Service Tank		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	881	800	BZ	105.2	East Out-of-Service Tank		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	887	800	BZ	106	106 Outfall		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	885	800	BZ	107	107 Hillside Oil Leak		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	N/A	900	BZ	108	Trench T-1		NA	4	Remedial Action	1998	1999	P				FY98 - source removed, treatment and trench fill in FY99
IHSS	N/A	900	BZ	109	Ryan's Pit (Trench 2)		NA	1	Remedial Action	1996	1997	R				CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	NE	BZ	110	Trench T-3		NA	2	Remedial Action	1996	1997	D				CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	N/A	NE	BZ	111.1	Trench T-4		NA	3	Remedial Action	1996	1997	A	1999			Accepted CDPHE/EPA Letter 7/9/99. Between Tier I & Tier II Rad soils, returned to T-4 in geotextile liner / 200 yards.
IHSS	N/A	NE	BZ	111.2	Trench T-5	900-12	1.G.A.B.02.05	62	No Action	NA						Regrade & revegetation
IHSS	N/A	NE	BZ	111.3	Trench T-6	900-12	1.G.A.B.02.05	69	No Action	NA						Regrade & revegetation
IHSS	N/A	NE	BZ	111.4	Trench T-7	NE-2	1.G.A.B.02.02	29	Remedial Action							> Tier I rads in Subsurface
IHSS	N/A	NE	BZ	111.5	Trench T-8	900-12	1.G.A.B.02.05	70	No Action	NA						Regrade & revegetation
IHSS	N/A	NE	BZ	111.6	Trench T-9	900-12	1.G.A.B.02.05	71	No Action	NA						Regrade & revegetation
IHSS	N/A	NE	BZ	111.7	Trench T-10	900-12	1.G.A.B.02.05	74	No Action	NA						Regrade & revegetation
IHSS	N/A	NE	BZ	111.8	Trench T-11	900-12	1.G.A.B.02.05	33	No Action	NA						Regrade & revegetation - Organics in groundwater
IHSS	N/A	900	BZ	112	903 Pad	900-11	1.G.A.B.04.01	6	Remedial Action							Characterization in FY98/99, remediation planned for FY03-04
IHSS	901	900	BZ	113	Mound Area		NA	5	Remedial Action	1997	1997	A	1999			Regrade & revegetation as part of T-1. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	N/A	NW	BZ	114	Present Landfill	000-5	1.G.A.B.0A.01	26	Remedial Action							CAP Final Cover - Capillary break cap
IHSS	N/A	SW	BZ	115	Original Landfill	SW-2	1.G.A.C.0A.02	44	Remedial Action							CAP Final Cover - HHRA, 10 -4 to 10 -6. Hot Spot Removal with capillary break cap.
IHSS	447	400	IZ	116.1	W. Loading Dock B447	400-3	1.G.A.C.04.03	INV	Remedial Action							Group w/157.2 for characterization-further characterization needed
IHSS	444	400	IZ	116.2	S. Loading Dock B 444	400-3	1.G.A.C.04.03	INV	No Action	NA						Group w/157.2-for characterization-further characterization needed
IHSS	551	500	IZ	117.1	N. Chem. Storage Site	500-1	1.G.A.C.05.01	INV	No Action	NA						May be diffuse source - need more characterization. Work in conjunction with 197. Suspected source is known buried material in PU&D Yard.
IHSS	551	500	IZ	117.2	M. Chem. Storage Site	500-4	1.G.A.C.05.04	INV	Remedial Action							Source Removal-May be diffuse source - need more characterization
IHSS	221	600	IZ	117.3	S. Chem. Storage Site		NA	NFA	No Action	NA	1997	A	1999			Tanks removed in 1997 (D&D). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	730	700	PZ	118.1	Solvent Spills W B730	700-3	1.G.A.C.07.03	8	Remedial Action							Preceeded by Natural Attenuation. Well installations for 118.1 was completed in WAD 76 (WBS 11061006), natural attenuation monitoring will be done in WAD 1.
IHSS	776	700	PZ	118.2	Solvent Spills N B707	700-3	1.G.A.C.07.03	77	No Action	NA						Needs data to continue - group with 150.7

A - Accepted by regulators
D - Data needed by regulators
P - Proposed in HRR
R - Rejected by regulators
S - Rejected / resubmitted

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ER Site Action Tracking List

TYPE	Bldg	Area	Zone	ID	Description	IHSS Group	WBS	Rank	Proposed Action	RA Comp. Date	NFA FY Proposed Date	NFA Status	Reg. Accept. Date	Public Accept. Date	ROD Date	Comment
IHSS	N/A	900	BZ	119.1	Solvent Spill Site OU1		NA	59	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD modification for removal of french drain (see French Drain removal project). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	N/A	900	BZ	119.2	E. Scrap Metal Storage		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	668	600	IZ	120.1	Fiberglass Area N B664	600-3	1.G.A.C.06.03	47	No Action	NA						Suggest grouping w/160 for further characterization. Contamination probably from 400 complex.
IHSS	664	600	IZ	120.2	Fiberglass Area W B664	400-10	1.G.A.C.04.0A	52	No Action	NA						Suggest grouping w/157.2 for further characterization.
IHSS	441	000	IZ	121	OPWL	000-2	1.G.A.C.00.02		Remedial Action							**P08**; 135ft, B881, rank 77 / **P57**; 112ft, B122, rank 78 / **Tank T-40** foamed and stabilized, IAC complete 1996, rank 10 / **Tank T-2 and T-3** foamed and stabilized, IAC complete 1996, rank 12 / **Tank T-29** is tanks-of-concern, new 1995 data shows PAHs in acid, rank 20 / **Tank T-27** is tanks-of-concern, PAHs in surface soil, rank 35 / **Tank T-12** invalid tank location, needs evaluation, rank 79 / **Tank T-31** invalid tank location, needs evaluation, rank 80 / **Tank T-33** invalid tank location, needs evaluation, rank 81 / **Tank T-34** invalid tank location, needs evaluation, rank 82 / **Tank T-35** invalid tank location, needs evaluation, rank 83.
IHSS	441	400	IZ	122	Underground Conc. Tks.	400-8	1.G.A.C.04.08	12	Remedial Action	1996						Interim action completed in FY96 - Dollars for soils/Soil around tank is contaminated/group w/121.
IHSS	VV007	700	PZ	123.1	Valve Vault 7		NA	NFA	No Action	NA	1997	D				IHSS issue gone. CDPHE/EPA Letter 7/9/99 - require additional data for NFA. D&D of vault required.
IHSS	N/A	700	PZ	123.2	Valve Vault W. of 707	000-2	1.G.A.C.00.02	INV	Remedial Action							Need further characterization. Group with IHSS 121
IHSS	774	700	PZ	124.1	Rad Liq. Waste Tk. 66	700-4	1.G.A.C.07.04	11	Remedial Action	1996						Interim action completed FY96 - Potential soil contamination under/around part of 774 UBC
IHSS	774	700	PZ	124.2	Rad Liq. Waste Tk. 67	700-4	1.G.A.C.07.04	11	Remedial Action	1996						Interim action completed FY96 - Potential soil contamination under/around part of 774 UBC
IHSS	774	700	PZ	124.3	Rad Liq. Waste Tk. 68	700-4	1.G.A.C.07.04	13	Remedial Action	1996						Interim action completed FY96 - Potential soil contamination under/around part of 774 UBC
IHSS	774	700	PZ	125	Holding Tk. 66	700-4	1.G.A.C.07.04	11	Remedial Action	1996						Interim action completed FY96 - Potential soil contamination under/around part of 774 UBC
IHSS	728	700	IZ	126.1	Process Waste Tks. - Westermost	700-4	1.G.A.C.07.04	32	No Action	NA						D&D will probably take care of required source removal.
IHSS	728	700	IZ	126.2	Process Waste Tks. - Eastermost	700-4	1.G.A.C.07.04	32	No Action	NA						D&D will probably take care of required source removal.
IHSS	774	700	PZ	127	Low Level Rad Waste Leak	000-2	1.G.A.C.00.02	65	No Action	NA						D&D will probably take care of required source removal.
IHSS	435	300	IZ	128	Oil Burn Pit #1	300-1	1.G.A.C.03.01	INV	Remedial Action							Needs further characterization/work in conjunction with IHSS 171& 134N
IHSS	443	400	IZ	129	Oil Leak E of B443	400-7	1.G.A.C.04.07	31	Remedial Action	1996						Interim Action FY96 - Characterize Tank 1, 2, 3 & Soil to close. Tank 4 done in FY96, outside contamination likely. Tanks and soil to be removed under D&D.
IHSS	N/A	900	IZ	130	Rad Site - 800 Area		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	776	700	PZ	131	Rad Site 700 Area No.1	700-3	1.G.A.C.07.03	38	Remedial Action							Needs additional characterization '69 fire.
IHSS	730	700	PZ	132	Rad Site 700 Area #1	000-2	1.G.A.C.00.02	8	Remedial Action							Source Removal - Partial interim action, tank foamed in 9/96.
IHSS	N/A	SW	BZ	133.1	Ash Pit 1	SW-1	1.G.A.B.03.01	40	Remedial Action							OU5 CAD/ROD - Source removal if > Tier I - Characterize. HHRA, 10 E-4 to 10 -6.
IHSS	N/A	SW	BZ	133.2	Ash Pit 2	SW-1	1.G.A.B.03.01	41	Remedial Action							OU5 CAD/ROD - Source removal if > Tier I - Characterize. HHRA, 10 E-4 to 10 -6.
IHSS	N/A	SW	BZ	133.3	Ash Pit 3	SW-1	1.G.A.B.03.01	42	Remedial Action							OU5 CAD/ROD - Source removal if > Tier I - Characterize. HHRA, 10 E-4 to 10 -6.
IHSS	N/A	SW	BZ	133.4	Ash Pit 4	SW-1	1.G.A.B.03.01	39	Remedial Action							OU5 CAD/ROD - Source removal if > Tier I - Characterize. HHRA, 10 E-4 to 10 -6.
IHSS	N/A	SW	BZ	133.5	Incinerator		NA	NFA	No Action	NA	1997	D				HHRA, 10 E-4 to 10 -6. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	N/A	SW	BZ	133.6	Concrete Wash Pad		NA	NFA	No Action	NA	1997	D				HHRA, 10 E-4 to 10 -6. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.

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IHSS	335	300	IZ	134(N)	Lithium Metal Site	300-1	1.G.A.C.03.01	91	Remedial Action							Need additional data - characterize/see also 128. Work in conjunction with 128 & 171
IHSS	331	300	IZ	134(S)	Lithium Metal Destruction Site	300-2	1.G.A.C.03.02	92	No Action	NA						Review data, there were hits & petroleum / do risk assessment to determine. VOC/TPH/BTEX.
IHSS	374	300	PZ	135	B373 CT Blowdown		NA	NFA	No Action	NA	1997	A	1999			NFA-300 area cap. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	457	400	IZ	136.1	Cooling Tower Pond W of B444	400-3	1.G.A.C.04.03	INV	Remedial Action							Group with 157.2, insufficient data/Characterize, remove source
IHSS	N/A	400	IZ	136.2	Cooling Tower Pond E. B444	400-3	1.G.A.C.04.03	54	Remedial Action							Group with 157.2, insufficient data/Characterize, remove source
IHSS	712	700	PZ	137	B.712/713 Cooling Tower BD.	700-6	1.G.A.C.07.06	75	No Action	NA						Need data.
IHSS	779	700	PZ	138	B779 Cooling Tower BD	700-7	1.G.A.C.07.07	72	Remedial Action							Need data.
IHSS	774	700	PZ	139.1N(a)	Hydroxide Tank, KOHm NaOH condensate	700-11	1.G.A.C.07.0B	60	No Action	NA						In Bowman pond overflow, group with bowman's pond (700-1108) / Characterize and remove source w/Bowan's pond, if applicable. Tanks to be removed by D&D. Sample around tanks to be included w/Boman's Pond SAP. PAHs in surface soil.
IHSS	774	700	PZ	139.1N(b)	Hydroxide Tank, KOHm NaOH condensate	700-4	1.G.A.C.07.04	60	No Action	NA						In Bowman pond overflow, group with bowman's pond (700-1108) / Characterize and remove source w/Bowan's pond, if applicable. Tanks to be removed by D&D. Sample around tanks to be included w/Boman's Pond SAP. PAHs in surface soil.
IHSS	774	700	PZ	139.1(S)	Hydroxide Tank	700-6	1.G.A.C.07.06	60	No Action	NA						
IHSS	714	700	PZ	139.2	HF Acid Tank	700-4	1.G.A.C.07.04	61	Remedial Action							
IHSS	952	900	BZ	140	Haz Disposal Area	900-11	1.G.A.B.04.01	NFA	No Action	NA	1998	R				Group with IHSS 155 Lip area. Removal of IHSS 155 will complete any residual contaminants remaining in 140. Actual area of IHSS 140 is less than 10 -6 and below rad threshold. PAHs in surface soil. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	971-4	900	IZ	141	Sludge Disposal Area		NA	NFA	No Action	NA	1997	A	1999			Needs to be looked at admin. BZ issues of NFA process versus risk method determination data may change w/ future events. HHRA, less than 10 E-6. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	N/A	NE	BZ	142.1	Pond A-1	NE-1	1.G.A.B.02.01		No Action	NA	1997	R				HHRA, 10 E-4 to -6 with pond data. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	SE	BZ	142.11	Pond C-2	NE-1	1.G.A.B.02.01	NFA	No Action	NA	1997	R				HHRA less than 10 E-6, includes pond and sediments. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	NE	BZ	142.12	Pond A-5		NA	NFA	No Action	NA	1997	P				Passed CDPHE screen.
IHSS	N/A	NE	BZ	142.2	Pond A-2	NE-1	1.G.A.B.02.01		No Action	NA	1997	R				HHRA, 10 E-4 to -6 with pond data. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	NE	BZ	142.3	Pond A-3	NE-1	1.G.A.B.02.01	NFA	No Action	NA	1997	R				HHRA, 10 E-4 to -6 with pond data. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	NE	BZ	142.4	Pond A-4	NE-1	1.G.A.B.02.01	NFA	No Action	NA	1997	R				Passed CDPHE screen with pond and sediment data. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	NE	BZ	142.5	Pond B-1	NE-1	1.G.A.B.02.01		Remedial Action							Originally proposed NFA in 1997 HRR. CDPHE/EPA Letter 7/9/99 - do not concur with NFA. Sediments will have to be remediated. HHRA less than 10 E-6, with pond and sediment data.
IHSS	N/A	NE	BZ	142.6	Pond B-2	NE-1	1.G.A.B.02.01		Remedial Action							Originally proposed NFA in 1997 HRR. CDPHE/EPA Letter 7/9/99 - do not concur with NFA. Sediments will have to be remediated. B-1 Dam Hot Spot, remove source. HHRA less than 10 E-6, with pond and sediment data.
IHSS	N/A	NE	BZ	142.7	Pond B-3	NE-1	1.G.A.B.02.01		Remedial Action							Originally proposed NFA in 1997 HRR. CDPHE/EPA Letter 7/9/99 - do not concur with NFA. Sediments will have to be remediated. HHRA less than 10 E-6, with pond and sediment data.
IHSS	N/A	NE	BZ	142.8	Pond B-4	NE-1	1.G.A.B.02.01	NFA	No Action	NA	1997	R				HHRA less than 10 E-6, with pond and sediment data. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	NE	BZ	142.9	Pond B-5	NE-1	1.G.A.B.02.01	NFA	No Action	NA	1997	R				Passed CDPHE screen with pond and sediment data. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	SE	BZ	142.10	Pond C-1	NE-1	1.G.A.B.02.01	NFA	No Action	NA	1997	R				HHRA less than 10 E-6, includes pond and sediments. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.

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IHSS	771	700	PZ	143	Old Outfall -B771	000-3	1.G.A.C.00.03	36	Remedial Action							
IHSS	701	700	PZ	144 (N)	Sewer Line Overflow	700-3	1.G.A.C.07.03	53	No Action	NA						Need characterization.
IHSS	777	700	PZ	144 (S)	Sewer Line Overflow	700-3	1.G.A.C.07.03	53	No Action	NA						Need characterization.
IHSS	NA	800	BZ	145	Sanitary Waste Leak		NA	C97	No Action	NA	1997	A	1997	1997	1997	OU1 CAD/ROD (3/12/97). Accepted CDPHE/EPA Letter 7/9/99.
IHSS	774	700	PZ	146.1	Concrete Tanks	700-4	1.G.A.C.07.04	INV	No Action	NA						Integral part of B774 to be addressed through D&D, remaining contamination addressed with UBC774.
IHSS	774	700	PZ	146.2	Concrete Tanks	700-4	1.G.A.C.07.04	INV	No Action	NA						Integral part of B774 to be addressed through D&D, remaining contamination addressed with UBC774.
IHSS	774	700	PZ	146.3	Concrete Tanks	700-4	1.G.A.C.07.04	INV	No Action	NA						Integral part of B774 to be addressed through D&D, remaining contamination addressed with UBC774.
IHSS	774	700	PZ	146.4	Concrete Tanks	700-4	1.G.A.C.07.04	INV	No Action	NA						Integral part of B774 to be addressed through D&D, remaining contamination addressed with UBC774.
IHSS	774	700	PZ	146.5	Concrete Tanks	700-4	1.G.A.C.07.04	INV	No Action	NA						Integral part of B774 to be addressed through D&D, remaining contamination addressed with UBC774.
IHSS	774	700	PZ	146.6	Concrete Tanks	700-4	1.G.A.C.07.04	INV	No Action	NA						Integral part of B774 to be addressed through D&D, remaining contamination addressed with UBC774.
IHSS	441	700	IZ	147.1	MAAS Area	000-2	1.G.A.C.00.02	INV	No Action	NA						Samples required (metals, rads, VOC) will be addressed with IHSS 121.
IHSS	881	800	IZ	147.2	B881 Conversion Act.		NA	NFA	No Action	NA	1997	A	1999			Accepted CDPHE/EPA Letter 7/9/99.
IHSS	123	100	IZ	148	Waste Leaks	100-4	1.G.A.C.01.04	INV	Remedial Action							Review data from 123 D&D (geoprobe) and UBC results. Associated with B123.
IHSS	774	700	IZ	149.1	Effluent Line	000-1	1.G.A.C.0A.01	INV	No Action	NA						To be removed by D&D - Address in IHSS 121.
IHSS	207A	700	PZ	149.2	Effluent Line	000-1	1.G.A.C.0A.01	INV	No Action	NA						To be removed by D&D - Address in IHSS 121.
IHSS	771	700	PZ	150.1	Rad Site N B771	700-4	1.G.A.C.07.04	INV	No Action	NA						Need additional samples taken. Paved, some old data exists.
IHSS	776	700	PZ	150.2	Rad Site W B 771/776	700-3	1.G.A.C.07.03	INV	Remedial Action							Need additional samples. Perform in conjunction with IHSS 143. Paved some old data exists.
IHSS	771	700	PZ	150.3	Rad Site B 771/774	700-4	1.G.A.C.07.04	48	No Action	NA						Overlaps OPWL 774 UBC. This IHSS to be addressed by IHSS 121, D&D and UBC 774.
IHSS	750	700	PZ	150.4	Rad Site NW B750	700-3	1.G.A.C.07.03	67	No Action	NA						Existing data needs review.
IHSS	707	700	PZ	150.5	Rad Site W B707 - **(DUPLICATE OF 123.2)**		NA		No Action	NA	1998	A	1999			Proposed in 98 HRR for NFA to clear it from the books. IHSS 123.2 is actual contamination site. Removed from maps. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	779	700	PZ	150.6	Rad Site S B779	700-7	1.G.A.C.07.07	93	Remedial Action							Combine with 150.8 and PAC 700-1105 (loading dock). Area in general may have been contaminated by 1969 fire (B776).
IHSS	776	700	PZ	150.7	Rad Site S B776	700-3	1.G.A.C.07.03	INV	Remedial Action							Source removal. Group with 118.2
IHSS	779	700	PZ	150.8	Rad Site S B779	700-7	1.G.A.C.07.07	INV	Remedial Action							
IHSS	262	300	PZ	151	Fuel Oil Leak Tk. 262		NA	NFA	No Action	NA	1997	A	1999			<5000 ppm TPH per RFCA / 300 area Cap. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	221	600	IZ	152	Fuel Oil Tank B452		NA	NFA	No Action	NA	1997	A	1999			See further investigation of underlying PAC (400-802). Tanks D&D on 1997. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	NA	900	BZ	153	Oil Burn Pit No. 2	900-2	1.G.A.B.02.04	63	No Action	NA						240 boxes of contaminated soil removed during construction of the PSZ in 1980, need a few samples to close, Geoprobe. IN PA fence, 11 ft of soil removed during fence construction.
IHSS	NA	900	BZ	154	Pallet Burn Site	900-2	1.G.A.B.02.04	94	No Action	NA						PSZ 1980, need a few samples to close, Geoprobe
IHSS	NA	900	BZ	155	903 Lip Area	900-11	1.G.A.B.04.01	6	Remedial Action							Characterization FY98/99, remediation planned.
IHSS	372A	300	IZ	156.1	Rad Site		NA	NFA	No Action	NA	1997	D				CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	NA	NE	BZ	156.2	Soil Disposal Area		NA	NFA	No Action	NA	1997	A	1999			HHRA less than 10 E-6. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	442	400	IZ	157.1	Rad Site N	400-7	1.G.A.C.04.07	50	No Action	NA						Need minimum sampling.
IHSS	439	400	IZ	157.2	Rad Site S	400-6	1.G.A.C.04.06	51	Remedial Action							Futher characterization needed, include IHSS 122 and others.
IHSS	551	500	IZ	158	Rad Site B551	500-2	1.G.A.C.05.02	23	No Action	NA						D&D of structure will remove this IHSS.
IHSS	559	500	PZ	159	Rad Site B559	500-3	1.G.A.C.05.03	68	Remedial Action							Perform in conjunction with IHSS 121, IHSS 159 and UBC 559.
IHSS	205	600	IZ	160	Rad Site B444 Parking Lot	600-4	1.G.A.C.06.04	22	Remedial Action							
IHSS	205	600	IZ	161	Rad Site W of B664	400-10	1.G.A.C.04.0A	INV	No Action	NA						Data supports proposing this site as a future NFA.
IHSS	71/718	900	PZ	162	Rad Site 700 Area	000-2	1.G.A.C.00.02	INV	No Action	NA						Review existing data.

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IHSS	T771G	700	PZ	163.1	Rad Site 700 North B774	700-4	1.G.A.C.07.04	55	Remedial Action							
IHSS	T771A	700	PZ	163.2	Americium Slab	700-4	1.G.A.C.07.04	INV	Remedial Action							Suspect contamination under T771A.
IHSS	205	600	IZ	164.1	Rad Site #2 800 Area		NA		No Action	NA	1997	D				CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	886	800	IZ	164.2	Rad Site #2 800 Area, Bldg 886 Spill	800-4	1.G.A.C.08.04	73	No Action	NA						Risk evaluation on soils, metals & Rad then NFA
IHSS	884	800	IZ	164.3	Rad Site #2 800 Area, Bldg 887 Pad	800-6	1.G.A.C.08.06	64	No Action	NA						Risk assessment
IHSS	N/A	900	PZ	165	Triangle Area	000-1	1.G.A.C.0A.01	30	No Action	NA						HHRA - less than 10 E-6, metals
IHSS	N/A	NE	BZ	166.1	Landfill Trench A		NA	NFA	No Action	NA	1996	P				Passed CDPHE screen.
IHSS	N/A	NE	BZ	166.2	Landfill Trench B		NA	NFA	No Action	NA	1996	P				Passed CDPHE screen.
IHSS	N/A	NE	BZ	166.3	Landfill Trench C		NA	NFA	No Action	NA	1996	P				Passed CDPHE screen.
IHSS	N/A	NE	BZ	167.1	Landfill Pond Spray Area		NA	NFA	No Action	NA	1997	A	1999			HHRA less than 10 E-6. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	N/A	NE	BZ	167.2	Landfill Pond Spray Area		NA	NFA	No Action	NA	1996	P				HHRA, 10 E-4 to -6.
IHSS	N/A	NE	BZ	167.3	Landfill Pond Spray Area		NA	NFA	No Action	NA	1996	P				Focused HHRA, 10 E-4 to -6
IHSS	N/A	SW	BZ	168	West Spray Field		NA	C95	No Action	NA	NA	A	1995	1995	1995	OU 11 CADI/ROD (9/1/95) - ROD for OU 11 closed
IHSS	N/A	500	IZ	169	Hydrogen Peroxide Drum Burial Waste		NA	NFA	No Action	NA	1998	D				No documentation to substantiate a drum was buried. Hydrogen peroxide release no threat regardless per '98 HRR. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	N/A	NW	BZ	170	PU&D Storage Yard		NA	NFA	No Action	NA	1998	S				Risk assessment data / PU&D yard IHSS 170, 174a and 174b NFA proposed in '98. CDPHE/EPA Letter 7/9/99 - require additional data for NFA. Proposed again in FY99 HRR update without IHSS 174a.
IHSS	335	300	IZ	171	Fire Training	300-1	1.G.A.C.03.01	INV	Remedial Action							Group w/ IHSSs 128 & 134 (N). Empirical data indicates free product present.
IHSS	N/A	000	IZ	172	Central Ave. Spill		NA	NFA	No Action	NA	1998	A	1999			Contaminants below Tier II action levels. No source found. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	991	900	PZ	173	Rad Site B991	900-1	1.G.A.C.09.01	INV	No Action	NA						Needs characterization, minimal sampling to NFA. Combine with IHSS 184.
IHSS	N/A	NW	BZ	174a	PU&D Yard - Drum Storage	NE/NW	1.G.A.B.02.03		Remedial Action							Due to recent data, this IHSS will require a remedial action. CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	N/A	NW	BZ	174b	PU&D Yard - Dumpster Storage		NA	NFA	No Action	NA	1998	A	1999			Risk assessment data / PU&D yard IHSS 170 and 174b NFA proposed in '98. Proposed again in FY99 HRR update. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	980	900	PZ	175	S&W B980 Cont. Storage	900 Area	1.G.A.C.09.00	84	No Action	NA						Minimal sampling to NFA, one hit (@ depth).
IHSS	964	900	PZ	176	S&W Contractor Yard	000-1	1.G.A.C.0A.01	37	No Action	NA						Risk assessment groundwater.
IHSS	885	800	IZ	177	B885 Drum Storage	800-5	1.G.A.C.08.05	57	No Action	NA						Requires sampling. Had PCB hit above AL.
IHSS	881	800	IZ	178	B 881 Drum Storage		NA	C95	No Action	NA	NA	A	1995	1995	1995	OU 15 CAD/ROD (10/1/95) - OU 15 IHSS closed by ROD
IHSS	865	800	IZ	179	B865 Drum Storage		NA	C95	No Action	NA	1996	A	1995	1995	1995	OU 15 CAD/ROD (10/1/95) - OU 15 IHSS closed by ROD deferred to bldg. Closure. Will need to include in IA ROD.
IHSS	883	800	IZ	180	B883 Drum Storage		NA	C95	No Action	NA	1996	A	1995	1995	1995	OU 15 CAD/ROD (10/1/95) - OU 15 IHSS closed by ROD deferred to bldg. Closure. Will need to include in IA ROD.
IHSS	334	300	IZ	181	B334 Cargo Container Area		NA	NFA	No Action	NA	1997	A	1999			Accepted CDPHE/EPA Letter 7/9/99.
IHSS	444	400	IZ	182	444/453 Drum Stor.	400-3	1.G.A.C.04.03	85	Remedial Action							
IHSS	952	900	BZ	183	Gas Detox Area	900-11	1.G.A.B.04.01	NFA	No Action	NA	1997	R				CDPHE/EPA Letter 7/9/99 - do not concur with NFA.
IHSS	992	900	PZ	184	Rad Site 991 Steam	900-1	1.G.A.C.09.01	INV	No Action	NA						Combine with IHSS 173.
IHSS	707	700	PZ	185	Solvent Spill		NA	C94	No Action	NA	NA	A	1994	1994	1994	OU16 CAD/ROD (10/1/94) - OU16 closed NFA
IHSS	552	500	IZ	186	Valve Vaults 11,12,13	500-1	1.G.A.C.05.01	66	Remedial Action							Need to research OU-13 RI for existing data. Need characterization
IHSS	452	400	IZ	187	Sulphuric Acid Spill B443	400-7	1.G.A.C.04.07	90	No Action	NA						Risk assesment. Not linked to acid spill. Needs further evaluation.
IHSS	371	300	PZ	188	Acid Leak (SE of B374)		NA	NFA	No Action	NA	1997	A	1999			Accepted CDPHE/EPA Letter 7/9/99.
IHSS	218	600	IZ	189	Nitric Acid Tanks		NA	NFA	No Action	NA	1997	D				CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	1-097	000	IZ	190	Caustic Leak	000-3	1.G.A.C.00.03	45	No Action	NA						Risk assessment, use all data, due to many overlaps
IHSS	209	400	IZ	191	Hydrogen Perox. Leak		NA	NFA	No Action	NA	1997	A	1999			Accepted CDPHE/EPA Letter 7/9/99.
IHSS	708	000	PZ	192	Antifreeze Discharge		NA	C94	No Action	NA	NA	A	1994	1994	1994	OU16 CAD/ROD (10/1/94)
IHSS	443	400	IZ	193	Steam Condensate Leak		NA	C94	No Action	NA	NA	A	1994	1994	1994	OU16 CAD/ROD (10/1/94)

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IHSS	240	700	PZ	194	Steam Condensate Leak		NA	C94	No Action	NA	NA	A	1994	1994	1994	OU16 CAD/ROD (10/1/94)
IHSS	N/A	NW	BZ	195	Nickel Carbonyl Disposal		NA	C94	No Action	NA	NA	A	1994	1994	1994	OU16 CAD/ROD (10/1/94)
IHSS	N/A	100	BZ	196	Backwash Pond (Listed as OU-5 on Map)	SW-2	1.G.A.C.0A.02	58	Remedial Action							Combine with IHSS 115 Old Landfill which will be capped. HHRA, 10 E-4 to -6. No separate action required.
IHSS	559	500	PZ	197	Scrap Metal Stor.	500-1	1.G.A.C.05.01	INV	Remedial Action							Work in conjunction with 117.1 and 117.2.
IHSS	N/A		BZ	199	Offsite Land Surface		NA	C97	No Action	NA	NA	A	1997	1997	1997	OU3 CAD/ROD (6/1/97)
IHSS	N/A		BZ	200	Great Western Res.		NA	C97	No Action	NA	NA	A	1997	1997	1997	OU3 CAD/ROD (6/1/97)
IHSS	N/A		BZ	201	Standley Lake		NA	C97	No Action	NA	NA	A	1997	1997	1997	OU3 CAD/ROD (6/1/97)
IHSS	N/A		BZ	202	Mower Reservoir		NA	C97	No Action	NA	NA	A	1997	1997	1997	OU3 CAD/ROD (6/1/97)
IHSS		NW	BZ	203	Inactive HW Stor.		NA	NFA	No Action	NA	1998	A	1999			Landfill CAP addressed in 96 HRR. Accepted CDPHE/EPA Letter 7/9/99.
IHSS	447	400	IZ	204	Uranium Chip Roaster		NA	C95	No Action	NA	1996	A	1995	1995	1995	OU 15 CAD/ROD (10/1/95), Deferred to bldg closure. Still need to close in IA ROD.
IHSS	460	400	IZ	205	Sump #3 Acid Site (SE of B460)	400-5	1.G.A.C.04.05	86	Remedial Action							Needs evaluation. Group with IHSS 157.2
IHSS	371	300	PZ	206	Inactive D-836 HW TK	300-5	1.G.A.C.03.05	87	No Action	NA						NFA - Insufficient data, characterize
IHSS	444	400	IZ	207	Inactive B444 Acid Dumpster	400-3	1.G.A.C.04.03	88	Remedial Action							Needs evaluation. Group with IHSS 157.2
IHSS	444	400	IZ	208	Inactive 444/447 Wst Str	400-3	1.G.A.C.04.03	89	Remedial Action							Needs evaluation. Group with IHSS 157.2
IHSS		SE	BZ	209	Surface Disturbance		NA	NFA	No Action	NA	1997	A	1999			Passed CDPHE screen. Accepted CDPHE/EPA Letter 7/9/99
IHSS	980	900	PZ	210	B980 Cargo Cont.		NA	NFA	No Action	NA	1997	A	1999			Accepted CDPHE/EPA Letter 7/9/99.
IHSS		800	IZ	211	B881 Drum Storage		NA	C95	No Action	NA	NA	A	1995	1995	1995	OU 15 CAD/ROD (10/1/95)
IHSS	371	300	PZ	212	B371 Drum Storage		NA		No Action	NA	1997	P				Deferred - To be handled w/ 371 D&D
IHSS	904 Pad	900	IZ	213	904 Pad, Pondcrete Stor.	900-3	1.G.A.C.09.02	INV	No Action	NA						Risk assessment required. Active storage unit, not sampled.
IHSS	750 Pad	700	PZ	214	750 Pad-Pondcrete/Saltcrete Stor.	700-8	1.G.A.C.07.08	49	No Action	NA						Risk assessment required
IHSS	771	700	PZ	215	Abandoned Sump near-774 Unit 55.13 T-40	700-4	1.G.A.C.07.04	INV	Remedial Action							Group with IHSS 121
IHSS	N/A	NE	BZ	216.1	East Spray Field-North Area		NA	NFA	No Action	NA	1996	P				Passed CDPHE screen.
IHSS	N/A	NE	BZ	216.2	East Spray Field-Center Area		NA	NFA	No Action	NA	1997	D				PPRG ratio less than 1, 2 downgradient wells. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	N/A	NE	BZ	216.3	East Spray Field-South Area		NA	NFA	No Action	NA	1997	D				PPRG ratio less than 1, 2 downgradient wells. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
IHSS	881	800	IZ	217	B881 Cyanide Trt.		NA	C95	No Action	NA	NA	A	1995	1995	1995	OU 15 CAD/ROD (10/1/95)
PAC	208	000	IZ	000-500	Sanitary Sewer System	000-3	1.G.A.C.00.03		No Action	NA						
PAC	202	000	BZ	000-501	Roadway Spraying		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	762	000	IZ	000-503	Solar Pond Water Spill Along Central Ave		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94
PAC	N/A	000	IZ	000-504	New Process Waste Line	000-4	1.G.A.C.00.04		Remedial Action							
PAC	N/A	IA	IZ	000-505	Storm Drains	000-3	1.G.A.C.00.03		Remedial Action							
PAC	222	100	IZ	100-600	Mercury Spill - Valve Vault 124-B B124		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	123	100	IZ	100-601	Building 123 Phosphoric Acid Spill		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	123	100	IZ	100-602	Building 123 Process Waste Line Break	000-2	1.G.A.C.00.02		Remedial Action							Review data - HRR process. Group with IHSS 121
PAC	123	100	IZ	100-603	Building 123 Bioassay Waste Spill	100-4	1.G.A.C.01.04		Remedial Action							Reference EPA Letter dated Dec 23, 1992. Group with IHSS 121
PAC	T130	100	IZ	100-604	T-130 Complex Sewer Line Leaks		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		100	IZ	100-605	Building 115 Hydraulic Oil Spill		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	125	100	IZ	100-606	Building 125 TCE Spill		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	111	100	IZ	100-607	Building 111 Transformer PCB Leak	100-3	1.G.A.C.01.03		No Action	NA						Reference EPA Letter dated Dec 23, 1992. Transformer located in Bldg. Incorporate in D&D.
PAC	131	100	IZ	100-608	Building 131 Transformer Leak		NA		No Action	NA	1998	A	1999			Reference EPA Letter dated Dec 23, 1992 - PCBs below cleanup level. Accepted CDPHE/EPA Letter 7/9/99.
PAC	121	100	IZ	100-609	Building 121 Security Incinerator	100-5	1.G.A.C.01.05		No Action	NA						Reference EPA Letter dated Dec 23, 1992
PAC	123	100	IZ	100-610	Asbestos Release - Building 123		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	123	100	IZ	100-611	Building 123 Scrubbber Solution Spill	100-4	1.G.A.C.01.04		Remedial Action							Reference EPA Letter dated Dec 23, 1992. Group with IHSS 148
PAC	119	100	IZ	100-612	Battery Solution Spill - Building 119		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992

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PAC	C130	100	IZ	100-613	Asphalt Surface in Lay Down N Bldg 130 *(formerly 000-501)*		NA		No Action	NA	1994					Accepted by EPA as 000-501.
PAC	N/A	300	IZ	300-700	Scrap Roofing Disposal		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	371	300	IZ	300-701	Sulfuric Acid Spill, Bldg 371		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	367	300	IZ	300-702	Pesticide Shed	300-6	1.G.A.C.03.06		No Action	NA						Reference EPA Letter dated Dec 23, 1992 - Characterize to determine remedial action
PAC	331	300	IZ	300-703	Building 331 North Area		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	381	300	IZ	300-704	Roof Fire, Bldg 381		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	374	300	IZ	300-705	Potassium Hydroxide Spill N. of Bldg 374		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	374	300	IZ	300-706	Evaporator Tanks N. of Bldg 374		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		300	IZ	300-707	Sanitizer Spill		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	371	300	PZ	300-708	Transformer N of B371		NA		Remedial Action	1996	1996	P				Source removed. Reference EPA Letter dated Dec 23, 1992
PAC	334	300	IZ	300-709	Transformer Leak 334-1		NA		No Action	NA	1996	P				Characterization data below action levels. Reference EPA Letter dated Dec 23, 1992
PAC	331	300	IZ	300-710	Gasoline Spill North of Building 331		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	373	300	IZ	300-711	Ni-Cad Battery Spil Outside Bldg 373		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94
PAC	373	300	IZ	300-712	1/2 g Antifreeze Spill Outside Bldg 373		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94
PAC	331	300	IZ	300-713	Caustic Spill N of Bldg 331		NA		No Action	NA	1994	P				HRR Update #8 - Jun 94
PAC	374	300	IZ	300-714	Laundry Waste Water Spill N of Bldg 374		NA		No Action	NA	1995	P				HRR Update #10 - Dec 94
PAC		300	IZ	300-715	Battery Acid Spill		NA		No Action	NA	1997	A	1999			Accepted CDPHE/EPA Letter 7/9/99.
PAC	443	400	IZ	400-800	Transformer 443-1		NA		No Action	NA	1998	A	1999			Reference EPA Letter dated Dec 23, 1992 - PCBs in soil below cleanup action level. Accepted CDPHE/EPA Letter 7/9/99.
PAC	447	400	IZ	400-801	Transformer, Roof of Building 447	400-3	1.G.A.C.04.03		Remedial Action							Reference EPA Letter dated Dec 23, 1992 - tied to 447 D&D.
PAC	334	400	IZ	400-802	Storage Shed B334	600-2	1.G.A.C.06.02		No Action	NA						Reference EPA Letter dated Dec 23, 1992 - Characterize
PAC	460	400	IZ	400-803	Misc Dumping, Building 460 Storm Drain	400-4	1.G.A.C.04.04		Remedial Action							Reference EPA Letter dated Dec 23, 1992.
PAC	202	400	IZ	400-804	Road North of Building 460	400-4	1.G.A.C.04.04		Remedial Action							Reference EPA Letter dated Dec 23, 1992.
PAC	443	400	IZ	400-805	Building 43 Tank #9 Leak		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	440	400	IZ	400-806	Catalyst Spill, Building 440		NA	56	No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	N/A	400	IZ	400-807	Sandblasting Area	400-10	1.G.A.C.04.0A		Remedial Action							Reference EPA Letter dated Dec 23, 1992.
PAC	442	400	IZ	400-808	Vacuum Pump Leak, Building 442		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	205	400	IZ	400-809	Oil Leak - 446 Guard Post		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	444	400	IZ	400-810	Beryllium Fire - Bldg 444	400-3	1.G.A.C.04.03		Remedial Action							Reference EPA Letter dated Dec 23, 1992.
PAC	443	400	IZ	400-811	Transformer 443-2, Bldg 443		NA		Remedial Action	1993	1998	A	1999			Document in '98 HRR. Accepted CDPHE/EPA Letter 7/9/99.
PAC	460	400	IZ	400-812	Tank T-2 Spill I Building 460		NA		No Action	NA	1994	P				HRR Update #6
PAC	460	400	IZ	400-813	RCRA Tank Leak in Bldg 460	400-5	1.G.A.C.04.05		No Action	NA						
PAC	444	400	IZ	400-814	A/C Compressor Release, Bldg 444 Roof		NA		No Action	NA	1994	P				HRR Update #8 - Jun 94
PAC	460	400	IZ	400-815	RCRA Tank Leak in Bldg 460	400-5	1.G.A.C.04.05		No Action	NA						HRR - D&D 460
PAC	515	500	IZ	500-900	Transformer Leak 515/516		NA		Remedial Action	1996	1996	P				Source Removed. Reference EPA Letter dated Dec 23, 1992
PAC		500	IZ	500-901	Transformer Leak 555/558		NA		Remedial Action	1996	1996	P				Source Removed. Reference EPA Letter dated Dec 23, 1992
PAC	559	500	IZ	500-902	Transformer Leak 559		NA		Remedial Action	1996	1996	P				Source Removed. Reference EPA Letter dated Dec 23, 1992
PAC	750HAZ	500	IZ	500-903	RCRA Storage Unit #1		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	N/A	500	IZ	500-904	Transformer Leak 223-1/223-2	500-5	1.G.A.C.05.05		Remedial Action							Reference EPA Letter dated Dec 23, 1992
PAC		500	IZ	500-905	Transformer Leak 558-1		NA		Remedial Action	1996	1996	P				Reference EPA Letter dated Dec 23, 1992
PAC	559	500	PZ	500-906	Asphalt Surface Near Bldg 559	500-6	1.G.A.C.05.06		No Action	NA						
PAC	N/A	500	IZ	500-907	Tanker Truck Release of hazardous Waste From Tank 231B	500-7	1.G.A.C.05.07		No Action	NA						
PAC	223	500	IZ	500-908	IHSS 156.1, 186		NA		No Action	NA	1995					HRR Update #12 - Jun 95 / See IHSS 186
PAC		500	IZ	500-909	Spent Photo Fixer Solution Release (IHSS 158)		NA		No Action	NA	1996	P				HRR Annual 1996
PAC	662	600	IZ	600-1000	Transformer Storage B662		NA		Remedial Action	1996	1996	P				Source Removed. Reference EPA Letter dated Dec 23, 1992

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PAC	662	600	IZ	600-1001	Temp. Waste Stor B663	600-1	1.G.A.C.06.01		No Action	NA		D				Reference EPA Letter dated Dec 23, 1992 - Characterize to determine remedial action. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
PAC	666	600	IZ	600-1002	Transformer Storage W B666		NA		No Action	NA	1996	P				Reference EPA Letter dated Dec 23, 1992
PAC	661	600	IZ	600-1003	Transformers N & S 661/675		NA		Remedial Action	1996	1996	P				Reference EPA Letter dated Dec 23, 1992
PAC	NA	600	IZ	600-1004	Central Avenue Ditch *(formerly identified as 400-820)*	600-5	1.G.A.C.06.05		No Action	NA						
PAC	205	600	IZ	600-1005	Former Pesticide Storage Area	600-6	1.G.A.C.06.06		No Action	NA						Need characterization
PAC	776	700	PZ	700-1100	French Drain North of Bldg 776/777	700-3	1.G.A.C.07.03		Remedial Action							Reference EPA Letter dated Dec 23, 1992
PAC	765	700	PZ	700-1101	Laundry Tank Overflow - Bldg 732	700-10	1.G.A.C.07.0A		No Action	NA						Reference EPA Letter dated Dec 23, 1992
PAC	776	700	IZ	700-1102	Transformer Leak - 776-4		NA		Remedial Action	1996	1997	D				Most of the source removed. Could not get clean, PCBs remain to depth - Reference EPA Letter dated Dec 23, 1992. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
PAC	707	700	IZ	700-1103	Transformer Leak B707		NA		Remedial Action	1996	1996	P				Source removed. Reference EPA Letter dated Dec 23, 1992
PAC	708	700	IZ	700-1104	Transformer Leak B708		NA		Remedial Action	1996	1996	P				Source removed. Reference EPA Letter dated Dec 23, 1992
PAC	779	700	PZ	700-1105	Transformer Leak - 779-1/779-2	700-7	1.G.A.C.07.07		Remedial Action							Reference EPA Letter dated Dec 23, 1992. Incorporate into IHSS 150.6 and 150.8.
PAC	762	700	PZ	700-1106	Process Waste Spill - Portal 1	700-12	1.G.A.C.07.0C		No Action	NA						**HRR '98** - Reference EPA Letter dated Dec 23, 1992. Needs characterization.
PAC	776	700	PZ	700-1107	Compressor Waste Oil Spill - Building 776		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	771	700	PZ	700-1108	Bowman's Pond	700-11	1.G.A.C.07.0B	28	Remedial Action							Reference EPA Letter dated Dec 23, 1992. The pre-remedial investigation work for Bowman's Pond was done in WAD 64 WBS 11053001.
PAC	778	700	PZ	700-1109	Uranium Incident - Bldg 778		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	771	700	PZ	700-1110	Nickel Carbonyl Burial West of Bldg 771		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	750	700	IZ	700-1111	Transformer Leak B750		NA		Remedial Action	1996	1996	P				Source removed. Reference EPA Letter dated Dec 23, 1992
PAC	776	700	IZ	700-1112	Transformer Leak B776-5		NA		No Action	NA	1996	P				Reference EPA Letter dated Dec 23, 1992
PAC		700	PZ	700-1113	IHSS 101		NA		No Action	NA	1995	P				HRR Update #11 - Mar 95
PAC		700	PZ	700-1114a	Release During Liquid Transfer Oper Bldg 774		NA		No Action	NA	1997	P				
PAC		700	PZ	700-1114b	Release During Liquid Transfer Oper Bldg 774		NA		No Action	NA	1997	P				
PAC	708	700	PZ	700-1115	Identification of Diesel Fuel in Subsurface Soils	700-1	1.G.A.C.07.01		Remedial Action							Accepted CDPHE/EPA Letter 7/9/99
PAC	776	700	PZ	700-1116	Transformer Leak South of Bldg 776	700-3	1.G.A.C.07.03	INV	Remedial Action	19XX						PCBs close to cleanup threshold. Further characterization needed to confirm. Site is within IHSS 150.7.
PAC	701	700	PZ	700-1117	Bldg. 701 Water Line Soil Put-back		NA		No Action	NA	1998	A	1999			Soil excavated for line repoir contains carbon tet, Pu and Am, all meeting permissable put-back threshold. Reference 1999 HRR update for Accepted date. Accepted CDPHE/EPA Letter 7/9/99.
PAC		800	IZ	800-1200	Valve Vault 2	800-3	1.G.A.C.08.03		Remedial Action							Reference EPA Letter dated Dec 23, 1992. Group with IHSS 121
PAC	881	800	IZ	800-1201	Radioactive Site south of Bldg 883	800-3	1.G.A.C.08.03		No Action	NA						Reference EPA Letter dated Dec 23, 1992. Needs characterization.
PAC	883	800	IZ	800-1202	Sulfuric Acid Spill, Bldg 883		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	865	800	IZ	800-1203	Sanitary Sewer Line Brk Btwn Bldg 865/866		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	866	800	IZ	800-1204	Bldg 866 Spills	800-1	1.G.A.C.08.01		Remedial Action							Reference EPA Letter dated Dec 23, 1992
PAC	881	800	IZ	800-1205	Bldg 881, East Dock	800-2	1.G.A.C.08.02		Remedial Action							Reference EPA Letter dated Dec 23, 1992
PAC	883	800	IZ	800-1206	Fire, Bldg 883		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	883	800	IZ	800-1207	Transformer Leak 883-4		NA		Remedial Action	1996	1996	P				Source removed. Reference EPA Letter dated Dec 23, 1992
PAC	881	800	IZ	800-1208	Transformer Leak 881-4		NA		No Action	NA	1996	P				Reference EPA Letter dated Dec 23, 1992
PAC		800	IZ	800-1209	Transformer Leak 800 area		NA		No Action	NA	1996	P				Reference EPA Letter dated Dec 23, 1992
PAC	865	800	IZ	800-1210	Transformers 865-1 & 865-2		NA		No Action	NA	1996	P				Reference EPA Letter dated Dec 23, 1992

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ER Site Action Tracking List

TYPE	Bldg	Area	Zone	ID	Description	IHSS Group	WBS	Rank	Proposed Action	RA Comp. Date	NFA FY Proposed Date	NFA Status	Reg. Accept. Date	Public Accept. Date	ROD Date	Comment
PAC	883	800	IZ	800-1211	Capacitor Leak, Bldg 883		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	866	800	IZ	800-1212	Building 866 Sump Spill	800-1	1.G.A.C.08.01		Remedial Action							Review data, potential source removal
PAC		900	IZ	900-1300	RO Plant Sludge Drying beds		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	991	900	PZ	900-1301	Bldg 991 Enclosed Area	900-1	1.G.A.C.09.01		No Action	NA						Reference EPA Letter dated Dec 23, 1992. Needs characterization.
PAC		900	IZ	900-1302	Gasoline Spill		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	991	900	IZ	900-1303	Natural Gas Leak		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	991	900	PZ	900-1304	Chromic Acid Spill - Bldg 991		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	991	900	PZ	900-1305	Building 991 Roof		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	991	900	IZ	900-1306	Transformers 991-1 & 991-2		NA		No Action	NA	1996	P				Reference EPA Letter dated Dec 23, 1992
PAC	993	900	IZ	900-1307	Explosive Bonding Pit				No Action	NA		D				Reference EPA Letter dated Dec 23, 1992 - Need to review data / to be characterized in FY99. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
PAC	980	900	PZ	900-1308	Gasoline Spill Outside of Bldg 980	900 Area	1.G.A.C.09.00		No Action	NA						HRR, review data
PAC	1900A	900	BZ	900-1309	OU 2 Field Treatability Unit Spill		NA		No Action	NA	1999	P				HRR, review data/Risk assessment needed / to be characteried in FY99
PAC	207B	900	IZ	900-1310	ITS Water Spill *(formerly 000-502)*	000-1	1.G.A.C.0A.01		No Action	NA						HRR, review data / No source, under Solar Pond cap
PAC		900	PZ	900-1311	Septic Tanks East of Building 991		NA		No Action	NA	1999	P				Review data / Characterize / to be characteried in FY99
PAC	1900A	900	IZ	900-1312	OU 2 Water Spill		NA		No Action	NA	1999	P				Review data / Characterize / to be characteried in FY99
PAC		900	IZ	900-1313	Seep Area Near OU2 Influent		NA		No Action	NA	1999	P				Review data / Characterize / to be characteried in FY99
PAC	1900A	900	PZ	900-1314	Solar Evaporation Pond 207B Sludge Release		NA		No Action	NA	1994	P				HRR Update #9 - Sep 94
PAC	202	900	IZ	900-1315	Tanker Trk Release on E Patrol Rd, N of Spuce		NA		No Action	NA	1995	P				HRR Update #11 - Mar 95
PAC	905	900	BZ	900-1316	Elevated Chromium Identified During Geotechnical Drilling		NA		No Action	NA	1995	P				HRR Update #10 - Dec 94
PAC	964	900	IZ	900-1317	Soil from crate in 964 Laydown Yard		NA		No Action	NA	1995	P				HRR Update #11 - Mar 95
PAC	993	900	BZ	900-1318	Release of F001 Listed Waste to Soil		NA		No Action	NA	1998	D				CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
PAC	202	NE	BZ	NE-1400	Tear gas Powder Release		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC	210	NE	BZ	NE-1401	NE Buffer Zone Gas Line Break		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		NE	BZ	NE-1402	East Inner Gate PCB Spill		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		NE	BZ	NE-1403	Gasoline Spill - Building 920 Guard Post		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		NE	BZ	NE-1404	Diesel Spill at Pond B-2 Spillway		NA		No Action	NA	1998	D				HRR '98, review data. CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
PAC		NE	BZ	NE-1405	Diesel Spill at Field Treatability Unit		NA		No Action	NA	1998	A	1999			HRR '98, review data. Accepted CDPHE/EPA Letter 7/9/99.
PAC		NE	BZ	NE-1406	771 Hillside Sludge Release		NA		No Action	NA	1998	A	1999			HRR '98, review data. Accepted CDPHE/EPA Letter 7/9/99.
PAC		NE	BZ	NE-1407	OU2 Treatment Facility	NE/NW	1.G.A.B.02.03		No Action	NA						Review data
PAC		NE	BZ	NE-1408	OU2 Test Well *(formerly NE-1406)*	NE/NW	NA		No Action	NA	1999	P				Review data-characterize
PAC		NE	BZ	NE-1409	Modular Tanks and 910 Treatment Sys Spill *(formerly 000-503)*	NE/NW	NA		No Action	NA	1999	P				Review data-characterize
PAC		NE	BZ	NE-1410	Diesel fuel Spill at field Treatability Unit		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94
PAC		NE	BZ	NE-1411	Diesel Fuel Overflowed from Tanker @ OU2		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94
PAC	202	NE	BZ	NE-1412	Trench T-12 Located @ OU2 East Trenches	NE/NW	1.G.A.B.02.03		No Action	NA						NFA - subsidence control
PAC	202	NE	BZ	NE-1413	Trench T-13 Located @ OU2 East Trenches	NE/NW.	1.G.A.B.02.03		No Action	NA						NFA - subsidence control
PAC		NW	BZ	NW-1500	Diesel Spill @ PU&D Yard *(formerly NW-175)*		NA		No Action	NA	1998	A	1999			NFA - cleaned up '98 HRR. Accepted CDPHE/EPA Letter 7/9/99.

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PAC		NW	BZ	NW-1501	Asbestos Release @ PU&D Yard *(formerly NW-176)*	NE/NW	NA		No Action	NA	1999	P				Asbestos Review data-characterize
PAC		NW	BZ	NW-1502	Improper Disposal of Diesel Contaminated Material at Landfill *(formerly NW-177)*		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94
PAC		NW	BZ	NW-1503	Improper Disposal of Fuel Contaminated Material at Landfill		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94 / **Appears to be duplicated by NW-1502 in '98 HRR.**
PAC		NW	BZ	NW-1504	Improper Disposal of Thorosilane Contaminated Material at Landfill		NA		No Action	NA	1994	P				HRR Update #7 - Apr 94
PAC		SE	BZ	SE-1600	Pond 7 - Steam Condensate Releases		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		SE	BZ	SE-1601	Pond 8 - Colling Tower Discharge Releases		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		SE	BZ	SE-1602	East Firing Range	900-11	1.G.A.B.04.01		Remedial Action							New HRR Sept 99
PAC		SW	BZ	SW-1700	Fuel Spill into Woman Creek Drainage		NA		No Action	NA	NA	A	1992			Reference EPA Letter dated Dec 23, 1992
PAC		SW	BZ	SW-1701	Recently Identified in Ash Pit	SW-1	NA		No Action	NA	1997	D				CDPHE/EPA Letter 7/9/99 - require additional data for NFA.
PAC		SW	BZ	SW-1702	Recently Identified in Ash Pit	SW-1	1.G.A.B.03.01		Remedial Action							Further chacterize / maybe source removal
UBC	122	100	IZ	B122	B122 UBC	100-1	1.G.A.C.01.01		Remedial Action							
UBC	123	100	IZ	B123	B123 UBC	100-4	1.G.A.C.01.04	46	Remedial Action							Bldg. Removed to slab in FY98.
UBC	125	100	IZ	B125	B125 UBC	100-2	1.G.A.C.01.02		Remedial Action							
UBC	331	300	IZ	B331	B331 UBC	300-2	1.G.A.C.03.02		No Action	NA						
UBC	371	300	PZ	B371	B371 UBC	300-3	1.G.A.C.03.03		Remedial Action							
UBC	374	300	PZ	B374	B374 UBC	300-4	1.G.A.C.03.04		Remedial Action							
UBC	439	400	IZ	B439	B439 UBC	400-1	1.G.A.C.04.01		Remedial Action							
UBC	440	400	IZ	B440	B440 UBC	400-2	1.G.A.C.04.02	56	Remedial Action							
UBC	441	400	IZ	B441	B441 UBC	400-8	1.G.A.C.04.08		Remedial Action							
UBC	442	400	IZ	B442	B442 UBC	400-7	1.G.A.C.04.07		Remedial Action							
UBC	444	400	IZ	B444	B444 UBC	400-3	1.G.A.C.04.03	INV	Remedial Action							Known contaminants plume.
UBC	447	400	IZ	B447	B447 UBC	400-3	1.G.A.C.04.03		Remedial Action							
UBC	528	500	PZ	B528	B528 UBC	500-3	1.G.A.C.05.03		Remedial Action							
UBC	559	500	PZ	B559	B559 UBC	500-3	1.G.A.C.05.03		Remedial Action							
UBC	701	700	PZ	B701	B701 UBC	700-3	1.G.A.C.07.03		Remedial Action							
UBC	707	700	PZ	B707	B707 UBC	700-2	1.G.A.C.07.02	INV	Remedial Action							Many known spills.
UBC	731	700	PZ	B731	B731 UBC	700-2	1.G.A.C.07.02		Remedial Action							
UBC	770	700	PZ	B770	B770 UBC	700-5	1.G.A.C.07.05		Remedial Action							
UBC	771	700	PZ	B771	B771 UBC	700-4	1.G.A.C.07.04		Remedial Action							Tunnels are a responsibility problem. Group with IHSS 121
UBC	774	700	PZ	B774	B774 UBC	700-4	1.G.A.C.07.04	INV	Remedial Action							Tunnels are a responsibility problem. Tanks removed, 1971 rad data exceeded Tier 1 levels.
UBC	776	700	PZ	B776	B776 UBC	700-3	1.G.A.C.07.03		Remedial Action							Tunnels are a responsibility problem
UBC	777	700	PZ	B777	B777 UBC	700-3	1.G.A.C.07.03		Remedial Action							
UBC	778	700	PZ	B778	B778 UBC	700-3	1.G.A.C.07.03		Remedial Action							
UBC	779	700	PZ	B779	B779 UBC	700-7	1.G.A.C.07.07	34	Remedial Action							Contamination due to B779.
UBC	865	800	PZ	B865	B865 UBC	800-1	1.G.A.C.08.01		Remedial Action							
UBC	881	800	IZ	B881	B881 UBC	800-2	1.G.A.C.08.02	25	Remedial Action							No pathway known.
UBC	883	800	PZ	B883	B883 UBC	800-3	1.G.A.C.08.03		Remedial Action							
UBC	886	800	PZ	B886	B886 UBC	800-4	1.G.A.C.08.04		Remedial Action							
UBC	887	800	IZ	B887	B887 UBC	800-5	1.G.A.C.08.05		Remedial Action							
UBC	889	800	IZ	B889	B889 UBC	800-6	1.G.A.C.08.06		Remedial Action							
UBC	991	900	PZ	B991	B991 UBC	900-1	1.G.A.C.09.01		Remedial Action							
PLM	N/A		BZ	881APLM	B881 Area Plume		1.G.A.B.0B.03	24	Natural Attenuation							NFA - Source may be due to UBC at B881. **Work being performed under the IMP.**
PLM	N/A		BZ	881PLM	881 Hillside Plume		1.G.A.B.0B.03	18	Natural Attenuation							No impact on surface water in Woman Creek drainage. **Work being performed under the IMP.**
PLM	N/A		BZ	CTPLM	Carbon Tet Plume		1.G.A.B.0B.03	17	Natural Attenuation							IHSS 118.1 is suspected source, DNAPL present. **Work being performed under the IMP.**
PLM	N/A		BZ	ETPLM	East Trenches Plume		1.G.A.B.0B.03	7	Remedial Action	1999						**Reactive Barrier** - FY99 - Currently impacting surface water in the S. Walnut Creek drainage.

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PLM	N/A		BZ	IAPLM	Industrial Area Plume		1.G.A.B.0B.01	19	Remedial Action							**Reactive Barrier** - No known impact on surface water.
PLM	N/A		BZ	MNDPLM	Mound Plume		1.G.A.B.0B.03	9	Remedial Action	1998						**Reactive Barrier** complete. Groundwater collection and treatment system in place.
PLM	N/A		BZ	OLPLM	Old Landfill Plume		1.G.A.B.0B.03	43	Natural Attenuation							NFA - HRA 10 E-4 to -6. Action required due to physical hazard. **Work being performed under the IMP.**
PLM	N/A		BZ	PUDPLM	PU&D Yard Plume		1.G.A.B.0B.03	21	Natural Attenuation / Monitoring							Source not present. No known inpacts on surface water.
PLM	N/A		BZ	RPPLM	903 Pad/Ryan's Pit Plume		1.G.A.B.0B.03	16	Natural Attenuation / Monitoring							FY99 - No impact in the Woman Creek drainage. **Work being performed under the IMP.**
PLM	N/A		BZ	SPPLM	Nitrate (Solar Pond) Plume		1.G.A.B.0B.03	15	Remedial Action	1999						**Reactive Barrier** - FY99 - Plume due to NO3, impacts surface water in N. Walnut Creek.
PRJ	N/A		BZ	FDPRJ	OU 1 French Drain Removal		1.G.A.B.0B.04									Remedial Action Termination - Dependent upon completion of the OU1 CAD/ROD (3/12/97). (see IHSS 119.1)
PRJ	N/A	N/A	IZ	IAREV	Site-wide Regrade and Revegetation		1.G.A.C.0B.05									
PRJ	N/A	N/A	IZ	ASPHREM	Site-wide Road and Asphalt Removal		1.G.A.C.0B.03									
PRJ	N/A	N/A	IZ	FNDREM	Removal of Major Building Foundations		1.G.A.C.0B.04									
PRJ	N/A		BZ	PNDREM	Pond Removal		1.G.A.B.02.01									
PRJ	N/A		IZ	EM50HDD	Horizontal Drilling		1.G.A.C.0B.02									
PRJ	N/A		BZ	EM50PLM	EM 50 Plume Maintenance & Monitoring		1.G.A.B.0B.06									
DOC			BZ	RFIBZ	Site RFI/RI		1.G.A.B.0C.01									Will be completed prior to issuance of Proposed Plan for OU-BZ CAD/ROD
DOC			BZ	RFIOU6	RFI/RI OU-6		NA			1995	NA					Has not been approved by agencies. They might reject the NFA recommendation for Ponds B-1 and B-2.
ANL			BZ	CMPRA	Comprehensive Risk Assessment		1.G.A.B.0C.03									Will be the main focus of the RFI/RI for the IA and BZ.
ANL	N/A	N/A	BZ	SWWB	Site-wide Water Balance		1.G.A.C.0B.06									Needs to focus on post-closure surface water contamination issues.
PRJ	N/A	NE	BZ	WCMM	Walnut Creek Mitigating Measures		1.G.A.B.0B.05									Will likely be refined to address contaminant migration issues.
ANL	N/A	N/A	IZ	GEOMAN	Land Configuration Design Basis		1.G.A.C.0B.07									Nesceeary to support final site grading plan.
DOC	N/A		BZ	OU1ROD	OU-1 Final CAD/ROD		1.G.A.B.0C.02									Might not require further contractor support.
DOC	N/A		BZ	INFROD	Interim CAD/ROD		1.G.A.B.0C.02									
PRJ	N/A	N/A	IZ	IACHAR	IA Characterization		1.G.A.C.0B.01									
PRJ	N/A	SW	BZ	ORGLNF	Original Landfill Monitoring & Maintenance		1.G.A.C.0A.02									
PRJ	N/A	NE	BZ	PRSLNF	Present Landfill Monitoring & Maintenance		1.G.A.B.0A.01									
TNK		100		T01	Tank 1 - OPWL	100-1	1.G.A.C.01.01		Remedial Action							
TNK	122	400		T02		400-8	1.G.A.C.04.08	12	No Action	NA						Foamed-RCRA interim status/Attached to OPWL
TNK	122	400		T03		400-8	1.G.A.C.04.08	12	No Action	NA						Foamed-RCRA interim status/Attached to OPWL
TNK		400		T04	Tank 4 - OPWL	400-3	1.G.A.C.04.03		Remedial Action							
TNK		400		T05	Tank 5 - OPWL	400-3	1.G.A.C.04.03		Remedial Action							
TNK		400		T06	Tank 6 - OPWL	400-3	1.G.A.C.04.03		Remedial Action							
TNK		500		T07	Tank 7 - OPWL	500-3	1.G.A.C.05.03		Remedial Action							
TNK		700		T08	Tank 8 - OPWL	700-4	1.G.A.C.07.04		Remedial Action							
TNK		700		T09	Tank 9 - OPWL	700-3	1.G.A.C.07.03		Remedial Action							
TNK	730	700		T10		700-3	1.G.A.C.07.03	8	Remedial Action							RCRA interim status (On NFA map twice)/Attached to OPWL. Group with 118.1

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TNK		700		T11	Tank 11 - OPWL	700-2	1.G.A.C.07.02		Remedial Action							
TNK		700		T12	Tank 12 - OPWL	700-4	1.G.A.C.07.04		Remedial Action							
TNK		700		T13	Tank 13 - OPWL	700-4	1.G.A.C.07.04		Remedial Action							
TNK	774	700		T14		700-4	1.G.A.C.07.04	13	Remedial Action							RCRA interim status/Attached to OPWL. Group with IHSS 121
TNK		700		T15	Tank 15 - OPWL	700-4	1.G.A.C.07.04		Remedial Action							
TNK	774	700		T16		700-4	1.G.A.C.07.04	11	Remedial Action							RCRA interim status/Attached to OPWL. Group with IHSS 121
TNK		700		T17	Tank 17 - OPWL	700-4	1.G.A.C.07.04		Remedial Action							
TNK		700		T18	Tank 18 - OPWL	700-3	1.G.A.C.07.03		Remedial Action							
TNK		700		T19	Tank 19 - OPWL	700-7	1.G.A.C.07.07		Remedial Action							
TNK		700		T20	Tank 20 - OPWL	700-7	1.G.A.C.07.07		Remedial Action							
TNK		800		T21	Tank 21 - OPWL	800-4	1.G.A.C.08.04		Remedial Action							
TNK		800		T22	Tank 22 - OPWL	800-4	1.G.A.C.08.04		Remedial Action							
TNK		800		T23	Tank 23 - OPWL	800-1	1.G.A.C.08.01		Remedial Action							
TNK		800		T24	Tank 24 - OPWL	800-2	1.G.A.C.08.02		Remedial Action							
TNK		800		T25	Tank 25 - OPWL	800-3	1.G.A.C.08.03		Remedial Action							
TNK		800		T26	Tank 26 - OPWL	800-3	1.G.A.C.08.03		Remedial Action							
TNK		800		T27	Tank 27 - OPWL	800-4	1.G.A.C.08.04		Remedial Action							
TNK		000		T29	Tank 29 - OPWL	000-2	1.G.A.C.00.02		Remedial Action							
TNK		700		T30	Tank 30 - OPWL	700-2	1.G.A.C.07.02		Remedial Action							
TNK		000		T31	Tank 31 - OPWL	000-2	1.G.A.C.00.02		Remedial Action							
TNK		800		T32	Tank 32 - OPWL	800-2	1.G.A.C.08.02		Remedial Action							
TNK		500		T33	Tank 33 - OPWL	500-3	1.G.A.C.05.03		Remedial Action							
TNK		500		T34	Tank 34 - OPWL	500-3	1.G.A.C.05.03		Remedial Action							
TNK		500		T35	Tank 35 - OPWL	500-3	1.G.A.C.05.03		Remedial Action							
TNK		700		T36	Tank 36 - OPWL	700-4	1.G.A.C.07.04		Remedial Action							
TNK		700		T37	Tank 37 - OPWL	700-4	1.G.A.C.07.04		Remedial Action							
TNK		700		T38	Tank 38 - OPWL	700-7	1.G.A.C.07.07		Remedial Action							
TNK		800		T39	Tank 39 - OPWL	800-2	1.G.A.C.08.02		Remedial Action							
TNK	854	800		T40		800-6	1.G.A.C.08.06	10	Remedial Action							Foamed-RCRA interim status/Attached to OPWL
Trenches T-3 through T-11 are also referred to as the East Trenches																
Assumes that Ponds B1, B2 & B3 will require source removal. All were originally proposed NFA in 1997.											177		94	27	27	

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Appendix I
Responsibility Matrix

Project Support Functions

STRATEGIC PLANNING AND INTEGRATION

- Serve as primary point-of-contact for stakeholders

Strategic Planning

- Develop innovative strategies to improve closure project schedule and cost performance
- Identify and develop technology solutions

Project Controls

- Develop and maintain project planning and controls policy, standards, manuals, and procedures
- Maintain closure project baseline changes
- Track and trend closure project performance
- Track target cost and schedule contract modifications
- Manage the Resource Allocation Program
- Recommend project resource priorities to CEO
- Conduct programmatic risk assessments
- Conduct schedule analysis
- Coordinate monthly project reviews and prepare Quarterly Critical Analysis reports
- Develop and maintain sitewide project planning and controls information systems
- Provide project planning and controls training
- Serve as DOE-RFFO point-of-contact on project controls

Baseline Management

- Coordinate, develop, integrate, and maintain the closure project baseline

Communications

- Manage overall communications, media relations, and community relations programs
- Coordinate tours and visits
- Support crisis and emergency communications

Performance Measurement

- Ensure consistent application of standards for earned value
- Develop standards and instructions for performance reports

ADMINISTRATION

- Provide program, policy, and guidance for Human Resources, Document Control, Records Management, Finance, Labor Relations, Prime Contract, Subcontract Administration, and Information Technology
- Provide administrative functional training
- Supply human resources, labor relations, document control, and subcontract administration professionals to projects
- Coordinate administrative lessons learned program

Human Resources

- Maintain Human Resources policies and procedures
- Administer the total compensation and benefits program
- Administer retiree benefits program
- Manage Diversity Awareness and Employee Concerns Programs
- Assess Equal Employment Opportunity, Affirmative Action, and Small Business Utilization Program performance
- Manage the Workforce Transition Program, including the Career Transition Center
- Provide viable and qualified employment candidates to projects
- Support the Resource Allocation Program
- Manage the Central Employment function

Finance

- Develop and maintain the payroll, financial accounting, and reporting systems for projects and certain subcontractors
- Provide cost accounting services and systems
- Perform property valuation
- Direct treasury services
- Manage and direct insurance program
- Manage reprographic, mail, and photography services
- Administer the Contractor-Controlled Insurance Program
- Process all Worker's Compensation issues and legacy insurance issues

Labor Relations

- Serve as corporate labor relations representative
- Negotiate and administer collective bargaining agreements
- Manage the central labor issues database
- Manage grievance resolution

Prime Contract

- Negotiate all modifications to the Prime Contract
- Manage the Prime Contract change process

Subcontract Administration

- Develop overall subcontracting strategy and framework
- Award and administer Master Task Agreements
- Support project task order awards
- Administer the Small Business Subcontracting Program
- Coordinate FOCI issues with Safeguards and Security
- Secure FOCI approvals
- Manage the Balanced Score Card
- Provide Subcontract Administration Training
- Supply Subcontract Administration professionals to projects

Records Management

- Manage and maintain sitewide Administrative Record
- Develop and implement sitewide document control
- Develop and implement records management
- Perform records and document control assessments

Information Technology

- Manage and operate all enterprise computer systems, telecommunications, networks, and information management systems
- Manage and operate the Central Computing Facility
- Develop and implement strategic information technology projects
- Manage select databases, application systems, programming, and licensing
- Manage the Intranet site and site firewall
- Maintain and enhance telephone, voicemail, and electronic data communications including mobile services
- Provide and maintain facsimile, radio, and pager equipment

ENGINEERING, ENVIRONMENTAL STEWARDSHIP, SAFETY, HEALTH, AND QUALITY

Provide program, policy, and regulatory guidance for:

- Integrated Safety Management System
- Management Assessment Program
- Environmental Stewardship Program
  - RFCA Program
  - Environmental Compliance and Monitoring Systems
- Safety and Health Program
- Engineering Program
- Quality Program
- PAAA Program
- Criticality Safety Program
- Nuclear Safety
- Standards Program
- Radiological Control Program
- Fire Protection Engineering

- Administer sitewide nuclear licensing program
- Conduct environmental compliance monitoring including air and surface and ground water
- Perform independent performance assessments
- Chair the Environment, Safety, and Health Council, Plant Review Committee, PAAA Steering Committee, Criticality Safety and Nuclear Safety Councils, ALARA committee, and the Joint Resolution Group
- Provide ESH&Q training
- Provide specialized engineering training
- Matrix qualified criticality safety engineers to projects
- Administer ESH&Q lessons learned program
- Prepare weekly safety statistics report
- Prepare quarterly ESH&Q reports
- Track, trend, report, and recommend actions for sitewide ESH&Q performance
- Certify wastes
- Develop and maintain engineering policy, standards, manuals, and procedures
- Maintain engineering records
- Supply specialty engineering professionals to projects
- Perform environmental assessments and audits
- Implement and oversee RFCA implementation
- Prepare Interim Final ROD
- Prepare and guide ER strategy
- Manage and guide End State initiatives
  - Water Balance
  - Actinide Migration Evaluation
  - Erosion Modeling
- Review environmental documents prepared by projects
- Develop and implement regulatory streamlining
- Provide integration of environmental issues between projects

Analytical Services

- Coordinate and perform analytical services
- Maintain analytical databases
- Maintain and operate the GIS system
- Perform data validation
- Maintain onsite and offsite analytical capability

Project Functions

PROJECT MANAGEMENT
- Safely operate in compliance with applicable standards and requirements and within the approved Authorization Basis
- Ensure compliance with applicable Material Stewardship requirements
- Release/authorize daily work in accordance with the Plan-of-the-Day
- Maintain safety systems
- Maintain and operate vaults
- Store legacy waste
- Manage and close RCRA units
- Conduct landlord functions
- Maintain physical facility security and ensure compliance with security requirements
- Store classified materials
- Manage property accounting
- Coordinate training
- Conduct project-specific training
- Implement IWCPs
- Implement and track corrective actions
- Develop project emergency plan
- Provide support for sitewide emergency response
- Server as CTR/requisitioner for project subcontracting
  - Approve subcontractor invoices
- Transfer compliant waste containers to the Material Stewardship Project

PROJECT PLANNING AND CONTROLS
- Maintain the project plan
- Coordinate change control
- Develop and maintain the project baseline including scope, schedule and cost
- Report project performance against the project plan
- Prepare monthly project reviews
- Provide resource allocation analysis
- Conduct contingency planning
- Prepare risk management plans

COMMUNICATIONS
- Provide communications products and coordinate communications activities
- Develop, implement, and coordinate internal and external communications

HUMAN RESOURCES
- Assist in employee hiring working with the Central Employment function
- Provide guidance, counseling, training, and expertise in the areas of performance appraisals, position description development, employee discipline process, diversity, equal employment opportunity, and affirmative action
- Implement Compensation Program including merit pay and promotion planning
- Ensure compliance with human resources and labor relations policies
- Provide resource prioritization/allocation recommendations to project management
- Support resource leveling among projects

Labor Relations
- Provide labor relations assistance including grievance management and labor agreement interpretation

RECORDS / DOCUMENT CONTROL
- Provide document control services
- Administer project records management program

SUBCONTRACT ADMINISTRATION
- Manage the bidding process including:
  - Commerce Business Daily announcement
  - RFP documentation
  - Pre-bid meeting
  - Initial kickoff meeting
  - Bid acceptance and review
  - Recommendation for award
  - Coordinate cost/price analysis
- Award and administer subcontracts and task orders
- Administer change process on subcontracts
- Identify changes affecting the prime contract and coordinate with Manager of Prime Contract
- Meet small business utilization goals

MATERIAL STEWARDSHIP
- Prepare management reports, closure progress reports, DOE reports, and metrics

Waste Management
- Enter data in WEMS and WSRIC
- Provide waste volume projections and types to the Material Stewardship Program
- Manage and dispose of facility property

Purchasing
- Requisition commodities
- Requisition major engineered equipment

Safeguards and Security
- Develop and maintain MC&A plans
- Develop and implement MAA/PA closure plans
- Conduct safeguards functions:
  - SNM inventory
  - MAR control
  - MBA
- Enter data into RockMAS for all moves

ENVIRONMENTAL STEWARDSHIP, SAFETY, HEALTH & QUALITY
- Maintain project Authorization Basis and coordinate AB issues
- Represent the project to regulatory agencies
- Implement Management Assessment Program (MAP)
- Implement environmental stewardship, health, safety, and quality program and requirements
- Coordinate ESH&Q independent performance assessments
- Collect, track, trend, and report on project ESH&Q metrics, including:
  - Occurrence reporting
  - Safety statistics
- Represent project on sitewide committees
- Develop environmental decision documents

ANALYTICAL SERVICES
- Project analytical requirements
- Provide analytical samples

BUILDING 371 PROJECT
- Operate the Plutonium Stabilization and Packaging System
- Operate the Caustic Waste Treatment System
- Operate B374 waste treatment systems
- Package metals in compliant containers
- Stabilize and package residue waste in compliance with waste acceptance criteria
- Remove, package, and stage SNM and residue waste
- Conduct deactivation
- Conduct decommissioning

BUILDING 707 PROJECT
- Conduct metal size reduction operations
- Package metals in compliant containers
- Stabilize and package residue waste in compliance with waste acceptance criteria
- Remove, package, and store SNM and residue waste
- Conduct deactivation
- Conduct decommissioning

BUILDING 771 PROJECT
- Develop and maintain sitewide Decommissioning Program
  - Develop, implement, and coordinate sitewide size reduction strategy
  - Develop and maintain the facility disposition cost model
  - Develop programmatic characterization documents
  - Test and recommend proven decommisioning technologies
  - Conduct advanced planning and facility characterization for contingent projects
- Remove, package, and store SNM and residue waste
- Operate OASIS and bottle box treatment facilities
- Conduct deactivation
- Conduct decommissioning

BUILDING 776/777 PROJECT
- Operate the ROSRS robot
- Remove, package, and stage SNM holdup
- Conduct deactivation
- Conduct decommissioning

REMEDIATION, INDUSTRIAL, AND SITE SERVICES

Remediation
- Implement and maintain the ER Program
  - Develop and recommend remediation alternatives
  - Implement remedial actions
  - Develop decision documents

Construction
- Provide construction services

Site Services
- Operate and maintain facility utilities
- Maintain and monitor alarm systems
- Manage emergency preparedness
- Provide fire protection

Disposition
- Maintain industrial facilities
- Conduct stabilization/hazard removal
- Accept buildings from Material Stewardship Project
- Conduct deactivation
- Conduct decommissioning

MATERIAL STEWARDSHIP PROJECT
- Conduct strategic planning for waste, safeguards and security, and transportation
- Provide technical direction and support to waste generating projects
- Assess compliance with applicable Material Stewardship requirements
- Direct PA Closure program
- Maintain site safety analysis report
- Transfer material requiring treatment or stabilization to the 371 Project
- Manage the sitewide property program
- Supply Material Stewardship personnel to the projects
- Deactivate Material Stewardship facilities

Waste Management and Traffic
- Operate treatment, storage, loading, and warehouse facilities
- Coordinate inter-building material movements
- Develop and maintain integrated shipping schedule
- Provide material transportation and shipping services
- Establish waste acceptance requirements for various wastestreams
- Meet receiver site waste acceptance criteria
- Recommend waste management process optimization techniques
- Manage TRU/M, LLW/M, sanitary, hazardous, medical, legacy, and orphan wastes
- Assign Material Stewardship personnel at receiver sites
  - Track political issues
  - Track site availability
  - Inform DOE and Congress (funding, policy, statutory and regulatory issues)
  - Identify DOE and commercial integrated solutions for material treatment and disposition
- Prescribe waste packaging criteria
- Manage and maintain the WEMS

Purchasing/Logistics
- Provide program, policy, and guidance for Purchasing function
- Purchase and supply to projects standard warehouse stock items, engineered equipment, and waste and shipping containers
- Manage the Credit Card Program
- Provide Purchasing training
- Operate warehouse facilities
- Perform commodity purchasing quality assurance

Safeguards and Security, Measurements, and SNM
- Develop and maintain the SNM and material management plan
- Ship all SNM
- Maintain security standards and procedures
- Conduct security training
- Maintain measurement standards and procedures
- Perform measurement independent assessments
- Maintain the NDA program
- Operate NDA equipment and enter measurement data into RockMAS
- Operate the Pu laboratories and the calibration standards
- Maintain the SNM accountability program
- Perform MC&A independent assessments
- Report NDA and DA data
- Maintain the RockMAS system